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# Views of Primary Education Teachers on the Effectiveness of the Use of Experiential Participatory Methods in the Teaching Context of the Hosting Classes

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## Abstract

This paper explores the perceptions of a sample of teachers as far as the teaching of experiential, participatory educational techniques to foreign pupils is concerned. The sample of the survey consisted of 50 teachers of primary schools throughout Greece while the data were collected through a questionnaire. Based on the findings gathered, conclusions are drawn on the cognitive and empirical background of the sample, on the use of techniques, as well as its perceptions on their effectiveness, the difficulties of their application and their training in them. In particular, the survey results show that almost all teachers had formed a good cognitive background about these techniques, but there is a need for further training and modernization of their knowledge on teaching. Finally, further discussion on the issues can be accomplished under study.

**Keywords:** Host Classes, Refugees, Experiential Participatory Educational Techniques

## 1. Introduction

The 'New School,' means creating an educational environment accessible to all pupils as well as equal educational opportunities, irrespective of gender, age, their ethnic and cultural origin, their socio-economic background, their religion and other similar personal characteristics (Kourkoutas, 2010).

In contemporary teaching, teachers are faced with a great challenge; the management of multicultural classes, including students with different cultural identities and speaking a different language from the official, taught at school. The arrival of refugee populations, a phenomenon that has taken place extensively in our country in recent years, makes it imperative to reformulate the educational system and modernize intercultural education (Palaiologou & Evangelou, 2003).

In Greece, the establishment of structures for intercultural education has been legally established since the early years of the political transition aiming to meet the educational needs of repatriated students (Nicholas, 2005). In the modern school and in our country (Matsangouras, 2007a, 2007b), teachers are asked to abandon traditional

teaching methods and apply techniques that promote, among other things, experiential learning (Dewey, 1980, Isted, 1938). Experiential, participatory educational techniques are some teaching tools that can be used for this purpose.

### *1.1 Defining interculturality*

The term "interculturality" refers to the interaction of two or more national and/or cultural groups that coexist in a particular social environment. This interaction is also linked to the socialization process of individuals, that is the process of integration into society (Chrysochoou, 2011).

### *1.2 Intercultural education*

Intercultural education is considered essential, and among other things, aims at supporting the smooth coexistence of various ethnic-cultural groups and the social integration of newly arrived populations, providing equal educational opportunities for all and promoting the cultivation of respect towards diversity (Palaiologou & Evangelou, 2003; Trilianos, 2006).

### *1.3 Intercultural and multicultural education*

The term "intercultural" refers to a constructive process of recognizing people's diversity, overcoming the boundaries of each cultural group, and interacting with each other. On the contrary, the term "multicultural" refers to the mere coexistence of different cultural groups in a particular space.

### *1.4 Five basic educational models of multicultural - intercultural education (Govaris, 2001; Mark, 2011).*

- The "assimilation model" promotes the assimilation of the minority group, (the refugees), by the dominant group. In addition to linguistic assimilation of these groups, by forcing them to learn only the official language of the host country in school, minority groups also suffer cultural homogeneity. This is firstly promoted through the non-systematic learning of their mother tongue in the school environment as a key element of their national identity. As a result, foreign pupils are forced to abandon other basic cultural elements, such as religion, and are expected to initiate behavioural norms similar to those followed by the native population.
- In the "integration model," the cultural diversity of the refugees seems to be accepted since it does not contradict the prevailing cultural ideologies. New concepts, such as mutual tolerance, cultural equality, and the teaching of official language as the second one with respect to the native language of foreigners, are found within this particular model. (Nikolaou, 2000). However, the parity between the groups seems to be promoted only at a theoretical level. First, foreign students are expected to accept the dominant culture, which again leads to their cultural inferiority. Respectively, the native population is expected to accept, to a certain extent, some minor characteristics of the minority group. Lastly, although equal educational opportunities for all are sought, something similar is not practical, since foreign pupils start from a different linguistic and cultural background compared to the others
- The "multicultural model"; the value of multiculturalism in a society is progressively recognized and aims to enable future generations to function in multicultural environments formed at national and/or global level (Bullivant, 1997). Therefore, efforts are being made to provide equal educational opportunities for all, taking into account the particular linguistic and cultural characteristics of foreign pupils. Among the educational policies of the model are various programs for foreign pupils to learn the official language of the host country as their second language, their mother tongue as well as the inclusion of multicultural dimensions in the curriculum for creative interaction among all groups (Mark, 2010).

- The "anti-racist model" focuses on limiting any discrimination against specific groups of students. Equal educational and social opportunities for all regardless of their ethnic, racial, and cultural identity and the fight against racism through culture are just some of the principles of this model. (Georgogiannis 1999; Tsiakalos, 2000). One of the aims of implementing such an educational model is to combat the exploitation of minority and/or weaker groups, both in the school environment and in society. Among other things, the model promotes the use of an "oppositional language" with racism-related concepts, which are commonplace in areas outside the educational context and, in particular, the political field; struggle, oppression, and power are just some of them (Gillborn, 1990).
- Today, the 'intercultural model' seems to promote interaction, equality, mutual acceptance, mutual respect, and cooperation among different cultural groups. This model is based on four basic principles: (a) empathy; (b) solidarity; (c) respect for cultural diversity; and (d) the elimination of nationalist thinking and prejudices (Georgogiannis, 1999 ). The intercultural approach promotes, among other things, the provision of equal educational opportunities and the principles of equality and recognition. In particular, it encourages the use of linguistic, cultural, and other differences among pupils (eg, religious) as a fertile ground for learning (Damanakis, 1997; Markou, 1997). In order for foreign students to experience the climate of acceptance, the teaching of their mother tongue seems to play - among other educational practices - a key role.

## 2. Research Methodology

### 2.1 Purpose

The purpose of this research is to investigate the perceptions of teachers teaching foreign pupils in Primary Schools about the use of experiential, participatory educational techniques. In particular, the following objectives as follows:

- (1) The development of the knowledge and empirical background of the participants regarding the use - or not - of the above techniques.
- (2) To examine their perceptions of the effectiveness of these techniques.
- (3) To raise their views on the causes of their difficulty.
- (4) Their attitudes regarding training in the above techniques.
- (5) The relationships between the perceptions of the participants in the above factors and their demographic characteristics.

### 2.2 Research questions

The conclusions of this work are drawn based on the following research questions:

- (1) Are the views of Primary Education Teachers on the knowledge of participatory learning techniques dependent on their demographic characteristics?
- (2) Are the views of Primary Education Teachers on the effective implementation of experiential, participatory educational techniques dependent on their demographic characteristics?
- (3) Are the views of Primary Education Teachers on the difficulties they encounter in the implementation of experiential, participatory educational techniques dependent on their demographic characteristics?
- (4) Are the views of Primary Education Teachers on the need to train them in the use of experiential, participatory teaching techniques dependent on their demographic characteristics?

### *2.3 The sample*

In the present study, fifty (50) teachers working in the Primary Schools participated. Most participants were women aged between 25 and 35, having a service of more than 10 years and a postgraduate diploma.

### *2.4 Data collection*

In the present study, a structured questionnaire of 34 questions was used. This questionnaire consists of thirty-four questions, including questions about events (Vamboukas, 1998). Ten of them correspond to demographic data (sex, age, marital status, years of teaching experience, workplace, type of public school, postgraduate or other studies) and the rest refer to four factors: the cognitive and empirical background of respondents about specific experiential, participatory educational techniques, the effectiveness of teaching these techniques, the causes of the difficulties in their application and the teachers' training in specific techniques. Given that this is a sample survey based on a standard questionnaire characterized by stability and coherence, it has given the prospect of reaching a part of the population in order to test the theoretical data. Consequently, the results derived from a sufficient number of teachers, and for this reason, the cases have been theoretically formulated and subjected to rigorous and valid control.

In order to formulate the content of the questions, the contribution of relevant references on experiential, participatory educational techniques, and experiential learning was important. In addition, the prevailing conditions in the Hosting Classes were taken into account in accordance with the official educational policy texts, which in the current period support refugees in many regions. Finally, the official educational material available to teachers is a factor that has been taken into account when formulating the content of the questions.

### *2.5 Limitations of the research*

This research is limited by specific elements based on the research purpose, formulation, and control of research questions, as well as the sample of participants/teachers. These methodological constraints and delimitations are identified in the following key points:

- The cognitive background and the perceptions of the participating teachers on specific experiential, participatory educational techniques were studied.
- Their perceptions on specific issues related to the teaching of these techniques (difficulty in applying, effectiveness, and training) were examined.
- The survey involved a certain number of teachers, which amounted to fifty (50) people. Consequently, the conclusions are not generalizable.
- Participating teachers were taught in Hosting Classes during the school year 2018 - 2019 to non-Greek pupils and in particular to refugees, mainly from Arab-speaking countries.
- A questionnaire constructed in the context of this paper was used to collect the data and not another research method (eg, interview).

### *2.6 Data analysis*

During the statistical analysis of the survey data, the frequencies (f) and the percentages (f%) of the answers per category (Field, 2009) were calculated for the examination of the specific research questions. The statistical analysis of the data was done with the statistical package Statistical Package for Social Sciences 23 for Windows 7.

### *2.7 Validity and credibility of research*

Given that this is a sample survey based on a standard questionnaire characterized by stability and coherence, the prospect of reaching a part of the population in order to test the theoretical data was given. Therefore, the results

are the result of a sufficient number of teachers, and for this reason, the cases have been theoretically formulated and subjected to rigorous and valid control.

### 3. Results

#### 3.1 Demographic characteristics

The distribution of the sample in relation to the demographic characteristics is as follows:

- **Gender:** From the sample of 50 educators surveyed, 12 (24%) were men, and 38 (76%) were women.
- **Age:** 40 (80%) belong to the age group 25-35, 6 (12%) to the age group 36-45 and 4 (8%) are between 46-55.
- **Marital status:** 30 (60%) were single, 19 (38%) were married and 1 (2%) divorced.
- **Teaching Experience:** 20 (40%) have 10 years of teaching experience, 20 (40%) less than 10 years and 10 have more than 10 years of experience (20%).
- **Basic studies and further training of the participants:** The total number of teachers, who participated in the research possess a university degree (100%). 33 (66%) hold a postgraduate diploma, 1 holds Ph.D. degree (2%), and 16 (32%) teachers have completed other studies.

**Table 1.** Sample distribution in relation to gender, age, marital status, teaching experience, and further studies.

		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Gender</b>					
Valid	Man	12	24.0	24.0	24.0
	Woman	38	76.0	76.0	100.0
	Total	50	100.0	100.0	
<b>Age</b>					
Valid	25-35	40	80.0	80.0	80.0
	36-45	6	12.0	12.0	92.0
	46-55	4	8.0	8.0	100.0
	Total	50	100.0	100.0	
<b>Marital Status</b>					
Valid	Single	30	60.0	60.0	60.0
	Married	19	38.0	38.0	98.0
	Divorced	1	2.0	2.0	100.0
	Total	50	100.0	100.0	
<b>Teaching Experience</b>					
Valid	10 years	20	40.0	40.0	40.0
	Less than 10 years	20	40.0	40.0	80.0
	More than 10 years	10	20.0	20.0	100.0
	Total	50	100.0	100.0	
<b>Further Studies</b>					
Valid	Postgraduate diploma	33	66.0	66.0	66.0
	Ph.D. Degree	1	2.0	2.0	68.0
	Other studies	16	32.0	32.0	100.0
	Total	50	100.0	100.0	

#### 3.2 Frequencies of the questionnaire scales

##### 3.2.1 Frequencies of the scale "Knowledge of experiential participatory educational techniques."

Regarding the experiential participatory educational techniques, the teachers stated that they know:

- workgroups (98%)
- brainstorming (96%)
- role play (96%)
- case study (82%)
- questions-answers (94%)
- simulation (70%)
- demonstration (62%)

**Table 2:** Knowledge of educational techniques

<b>Educational techniques</b>	<b>Frequency</b>	<b>Percent</b>
<b>Workgroups</b>	48	98%
<b>Brainstorming</b>	49	96%
<b>Roleplay</b>	48	96 %
<b>Case study</b>	41	82%
<b>Questions answers</b>	47	94%
<b>Simulation</b>	35	70%
<b>Demonstration</b>	31	62%

The experiential participatory educational techniques that teachers have used in the Hosting Classes:

- workgroups (74%)
- brainstorming (70%)
- role play (72%)
- case study (40%)
- questions-answers (76%)
- simulation (28%)
- demonstration (38%)

**Table 3:** Implementation of educational techniques

<b>Educational techniques</b>	<b>Frequency</b>	<b>Percent</b>
<b>Workgroups</b>	35	70%
<b>Brainstorming</b>	37	74%
<b>Roleplay</b>	36	72 %
<b>Case study</b>	20	40%
<b>Questions answers</b>	38	76%
<b>Simulation</b>	14	28%
<b>Demonstration</b>	19	38%

The causes of not implementing the experiential participatory educational techniques are:

- Students' language background (24%)
- Unsuitability (16%)
- Difficulties in applying the techniques (10%)
- Lack of teaching time (10%)
- Lack of materials (8%)
- Poor knowledge (6%)
- Unnecessary (4%)
- Unable to fit the curriculum (2%)
- Did not occur (2%)
- I have used them all (10%)
- I do not know/do not answer (8%)



**Table 4:** Causes of not implementing the techniques

Causes	Frequency	Percent
Students' language background	12	24%
Unsuitability	8	16%
Difficulties in applying the techniques	5	10%
Lack of teaching time	5	10%
Lack of materials	4	8%
Poor knowledge	3	6%
Unnecessary	2	4%
Unable to fit the curriculum	1	2%
Did not occur	1	2%

### 3.2.2 Frequencies of the scale "Effectiveness of application of experiential participatory educational techniques."

**Table 5:** Fields where the techniques are applied

	Very much	Much	A little	Little	Not at all
The objectives of teaching are achieved:	14%	36%	44%	6%	0%
The quality of teaching improves:	22%	36%	36%	6%	0%
The role of teachers changes:	22%	36%	36%	6%	0%
Modern learning principles are applied:	16%	40%	36%	6%	2%
The pupils' special characteristics are boosted:	20%	40%	38%	2%	0%
The pupils' educational needs are satisfied:	18%	38%	42%	2%	0%
The effectiveness of teaching intervention is achieved:	18%	38%	42%	2%	0%
Internal school reform is achieved:	10%	32%	28%	28%	2%

### 3.2.3 Frequencies of the scale "Difficulties in the application of experiential participatory educational techniques."

**Table 6:** The relation between the difficulties of the techniques and specific fields

	Very much	Much	A little	Little	Not at all
The difficulties are related to the lack of theoretical knowledge in relation to the advantages of their application:	2%	22%	24%	36%	16%
The difficulties are related to the lack of theoretical knowledge in relation to the disadvantages of their application:	2%	22%	24%	34%	18%
The difficulties are related to the lack of theoretical knowledge in relation to the standards of proper implementation:	4%	16%	44%	24%	12%

The difficulties are related to the lack of practical knowledge regarding their effective implementation:	4%	16%	44%	24%	12%
The difficulties are related to the lack of suitable venues for their effective implementation:	28%	46%	20%	4%	2%
The difficulties are related to the lack of appropriate educational tools:	30%	38%	22%	8%	2%

### 3.2.4 Frequencies of the scale "Training Primary Education Teachers to use experiential participatory educational techniques."

Regarding the necessity of training, 92% of the teachers answered positively, and 8% not.

The reasons why they need training are:

- The importance of training (26%)
- Better application of experiential techniques (24%)
- Desire to learn new techniques (14%)
- Meaning of experiential techniques (12%)
- Insufficient knowledge (8%)
- Better training (4%)
- Unable to handle situations in Host Classes (2%)
- Difficulty in experiential techniques (2%)
- I do not know/do not answer (2%)

**Table 7:** Causes of teachers' attitudes towards their training in the use of experiential participatory educational techniques.

Reasons	Frequency	Percent
<b>The importance of training</b>	13	26%
<b>Better application of experiential techniques</b>	12	24%
<b>Desire to learn new techniques</b>	7	14%
<b>Importance of experiential techniques</b>	6	12%
<b>Insufficient knowledge</b>	4	8%
<b>Better training</b>	2	4%
<b>Unable to handle situations in Host Classes</b>	1	2%
<b>Difficulty in experiential techniques</b>	1	2%
<b>I do not know/do not answer</b>	1	2%

The reasons why they do not need training are:

- Sufficient knowledge (4%)
- Techniques depending on educational environments (2%)

**Table 8:** Causes of teachers' attitudes towards their training in the use of experiential participatory educational techniques.

Reasons	Frequency	Percent
Sufficient knowledge	2	4%
Techniques depending on educational environments	1	2%

With regard to training issues, the teachers stated the following topics:

- Practical application of techniques (46%)
- Teaching issues (20%)
- Teaching Greek as a foreign language (12%)
- Extending general knowledge (8%)
- Multiculturalism - Identity of the "Other" (6%)
- Refugee human rights (4%)
- I do not know/do not answer (4%)

**Table 9:** Sample distribution of the preferred topics of its training

Education Topics	Frequency	Percent
Practical application of techniques	23	46%
Teaching issues	10	20%
Teaching Greek as a foreign language	6	12%
Extending general knowledge	4	8%
Multiculturalism - Identity of the "Other"	3	6%
Refugee human rights	2	4%
I do not know/do not answer	2	4%

#### 4. Discussion

According to the responses of the teachers who participated in the present study, it was revealed that almost all had formed a good cognitive background about experiential participatory educational techniques. More than half of the respondents were aware of the majority and/or all of the techniques included in the questionnaire (brainstorming, work groups, role play, case study, questions-answers, simulation, and demonstration). These findings are likely to be related to some demographics in the sample, such as age, teaching experience, and level of study. Focusing on the experiential participatory educational techniques, working groups seemed to be the predominant ones. This particular finding is likely to be related to the systematic promotion of group cooperative teaching methods in Primary School in all cognitive subjects.

Despite the fact that more than half of the teachers consider it easy to apply the experiential participatory educational techniques according to a relevant question, the percentage that they said they apply them, is decreasing compared to what they said they knew. The predominant cause of not applying the techniques in the Host Classes is the different linguistic background of their pupils. Indeed, in the Legislative Framework for Hosting Classes, there is no provision of an interpreter throughout teaching that could facilitate communication between teachers and foreign pupils. In addition, translation software is not available. Finally, there is no recruitment of educational staff who have knowledge of the mother tongue of foreign pupils.

Another cause is that they are considered inappropriate and difficult. Obviously, since several teachers declared that they had not applied the above techniques, they would not have checked their suitability but would not be

familiar with them. Moreover, this finding is also related to the fact that much of the sample has less than 10 teaching years. Consequently, they may not have used them systematically in the classroom.

The lack of materials and the limited teaching time are also mentioned as causes, while one last difficulty was the teachers' inadequate knowledge of experiential participatory educational techniques. This finding is probably related to the fact that most of the sample has a service experience of 10 years or more and has not been trained in these techniques in recent years. In the bibliographic review, the material was tracked only from training conducted systematically and organized by the Ministry of Education in 2011 on issues of intercultural education, therefore a reflection is raised as to whether the participants had the opportunity to attend that training as active teachers or were still studying at the university.

Finally, it is necessary for teachers to be provided with the training. Regarding the content of the training, most of the sample highlighted some practical issues that it would like to follow concerning the implementation of experiential participatory educational techniques and/or their use in supporting foreign pupils during their Greek learning language. Given the young age of these teachers, it seems logical to want to train on more practical issues, as they are expected to work in classes for several years. In addition, the majority would like the training sessions to be held in venues where seminars can be held, probably by thinking that they will have the opportunity to apply the techniques to the teaching practice and due to the easier access to these venues due to the school position. Moreover, over 50% seems to trust teachers who have already applied the techniques to the teaching practice and have the experience of teaching them.

The positive attitude of the sample towards training can also be related to its positive perceptions of the effectiveness of experiential participatory educational techniques. Most of the sample highlighted their effectiveness in taking advantage of the particular characteristics of students in teaching. A large percentage thinks they can help them improve the quality of their teaching intervention, change their role, promote modern learning principles, meet the educational needs of their students, improve the effectiveness of their teaching intervention and achieve its teaching objectives. As was the case with the sample educators, many may be theoretically aware and/or willing to apply the above techniques, but they lack practical knowledge. In addition, the modernization of teacher knowledge in teaching, as well as technical and intercultural education, is imperative due to the widespread influx of migratory and refugee flows into our country in recent years.

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## Teaching Application of Micro-lesson and Flipped Classroom

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### Abstract

The paper introduced the application significance of micro-lesson and flipped classroom teaching model. It discussed the application value and analyzed the problems of the flipped classroom teaching model. Implications of practices of the teaching model are also discussed.

**Keywords:** Application Significance, Micro-Lesson, Flipped Classroom, Application Value, Problem Analysis

### Introduction

As a “new online video course,” with the popularization of mobile wireless network, micro-lesson/flipped classroom, as one of the major carriers of mobile learning for contemporary college students, can not only adequately meet the needs of students’ mobile learning, but also promote the reform of teaching modes (Zhang, 2017).

The central part of micro-lesson/flipped classroom is micro-lesson video, and the video is used for learners to learn at their own convenient time and place by using the corresponding video terminal. The software platform system of micro course/flipped classroom must be built to realize the teaching purpose of micro course/flipped classroom. After the design of the micro-lesson system and the production of micro-lesson videos, teaching application should be carried out to reflect the practical significance of micro-lesson teaching and improve the teaching quality.

Two basic conditions should be prepared for the development of micro-lesson teaching. One is to build (or purchase, lease, etc.) micro-lesson teaching system platform. The second is to study and design the integrated classroom teaching plan suitable for this course and this specialty, to efficiently organize the implementation of micro-lesson teaching. To obtain expected educational and teaching effects, without the support of these two basic conditions, micro-lesson teaching is just like a castle in the air, which is challenging to carry out effectively and for a long time.

Generally speaking, the construction of micro-lesson teaching system platform does not need every teacher to participate, but it is necessary to master the functions and methods of the platform, to organize and carry out micro-lesson teaching. However, flipped classroom teaching plan design and writing is a fundamental skill that

every teacher must master, which is related to the effectiveness and quality of micro-lesson teaching implementation.

### **Application Significance of Micro-lesson and Flipped Classroom Teaching Model**

#### **1. Promoting the development of mobile learning**

With the popularity of wireless networks and mobile devices, using new media means a lot in class teaching. The study of mobile learning draws the attention of relevant experts and scholars, and the learning resources based on the new mobile device is relatively scarce and hard to spread deep for multichannel learning. Thus it is inevitable for many students to use mobile "entertainment." With the large-scale construction of micro-lesson resources and the strengthening publicity and full application, more students will transfer from mobile "entertainment" to mobile learning. The most prominent feature of mobile learning is fragmented learning, while micro-lesson resources that are short and concise. Mobile learning can be said to be a seamless connection, which makes students' curriculum study could break the boundary of time and space, and could better promote college students to develop the habit of lifelong learning.

#### **2. Promoting the reform of teaching models**

In recent years, it has been advocated "teacher-directed and student-centered" in the field of education. The application of microteaching mode reflects the students' main status. Students actively depend on the internet to download resources, select learning materials, grasp the learning process based on the knowledge they have mastered. According to the online assessment and self-assessment, the students' leading status will be embodied. At the same time, especially in the after-class evaluation, teachers also play their due guiding role, which conforms to the current trend of teaching model reform.

#### **3. Promoting the professional development of teachers**

As to micro-lesson teaching, the time is short, but "Sparrow is small, but has all the internal organs." All the teaching links from lesson preparation to teaching assessment should be paid attention to. Even there will be more factors to consider in the lessons. For example, how a knowledge point will be illustrated clearly in a relatively short period to attract the attention of the students, which puts forward higher demands on teachers. Therefore, carrying out micro-lesson activities is not only a demonstration of teachers' professional teaching ability but also an expression of teachers' personal charm. Teachers should step out of the classroom and onto the "screen" to reflect the characteristics of both technology and art, to continually improve teachers' teaching and information technology abilities.

#### **4. Meeting the requirements of the times**

With the popularity of wireless mobile network and people's life rhythm speeding up, a micro-lesson can help people learn knowledge, understand a formula, master a principle, and so on in a short period. Micro-lesson is not only a way to make modern people happy, but it is also one of the most convenient modes of learning. With the establishment of micro-lesson platforms and resources, it will bring convenience to more people's learning, promote the construction of learning society, learning organization, and learning family. With the development of information technology and the deepening of people's understanding of micro-lesson, micro-lesson resources will become a new learning carrier and promote classroom teaching. Besides, mobile communication equipment will play an essential role in mobile learning.

#### **(5) Meeting learners' expectations to the maximum extent**

Due to the gap between self-study ability and the differences of career planning among classroom students, the platform function is sometimes difficult to meet learners' needs and expectations, making the learners are not



interested in the learning platform. Therefore, the practical value of the platform must be developed based on fully meeting the needs of learners.

(6) Making good use of cloud computing, big data and other modern technologies to realize the high application value of the platform at low cost

It is necessary to make full use of cloud computing, big data, and other modern information technologies according to the characteristics of an educational management system in different types of colleges and universities. In addition, it is also important to design platforms from the perspective of sustainable development, to achieve the goal of low cost and high application value. Based on micro-lesson teaching, the large-scale advantages of MOOCs are realized utilizing modular expansion, so as to meet the needs of various colleges and universities with low cost and different scale of application, and maximize the cost-effective and practical value of the platform.

### **Application Value and Problem Analysis**

#### **1. Application value of the teaching model**

After teachers' applications in primary and secondary schools and universities in China in recent years, it is not only proved that the combination of micro-curriculum and flipped classroom has the above application significance, but also has the value of extensive promotion and application, which is manifested in the following five aspects.

##### **a. It provides an effective platform for implementing effective mixed teaching mode**

Flipped classroom provides an effective comprehensive teaching platform for teaching reform and enables teachers to apply modern information technology into different course content and characteristics. Therefore in different types of colleges, course features, learners' characteristics, and teaching objectives are required to realize the diversification of teaching modes. Flexible activation of teaching methods and enhancement of teachers' adopting new teaching mode are required to increase the confidence of teaching idea.

##### **b. It can improve learners' innovative consciousness and ability**

According to Zhang's (2017) research, after flipped classroom teaching, learners' autonomous learning ability is strengthened, their expression ability is improved. Now the insight of the problem has been raised at the same time with a sense of bold innovation. At present, there are still some problems in training learners to solve problems and innovate, which cannot adequately meet the needs of society for talents. Flipped classroom teaching is a long-term productive and subtle training mode in cultivating learners' innovative ability.

##### **c. It can provide enough time and energy for practical teaching**

Usually, in the process of practical learning, teachers have to find time for supplementary theoretical learning, which sometimes leads to insufficient practical time. After adopting flipped classroom teaching, all theoretical learning is conducted through pre-class self-study. Moreover, practical learning is carried out, with sufficient time and satisfactory theoretical preparation, so as to improve learners' professional ability and skills significantly.

##### **d. It can make up for the defects of the practical teaching conditions**

Due to the unbalancing economic development, no primary and secondary schools and institutions of higher learning have insufficient practical teaching conditions to some extent. The situation seriously affects teaching practice. After the combination of micro course and flipped classroom is adopted, some micro-lesson videos and

teaching resources of practical teaching can be shared within a specific range, and learners can learn by themselves before class through micro-lesson videos, classroom discussions, and interactions.

e. Flipped classroom teaching is a teaching reform project with low investment and quick results

The teaching mode combining micro-curriculum and flipped classroom requires certain investment in equipment, software, and teacher training. If teachers are the leading force, universities are the unit for unified layout and implementation, it is actually a cost-effective teaching reform project. Now, primary and secondary schools, colleges and universities have carried out the basic hardware conditions. Also, most of them have the terminal equipment of video learning (computer, mobile phone, etc.). The impact of learners has been dissolved in full, make its turn to micro course learning, is a triple-win thing (quitting game addiction, autonomous learning, etc.).

Through the combination with other counties and cities, excellent teachers from various disciplines are organized to form a teaching team of each discipline to develop micro-lessons. Universities organize excellent teachers of various departments and majors to develop micro-lessons. The actual investment for each course is meager, which has high-cost performance and social benefits.

2. The main problems existing in the current promotion and application and analysis

There are still some problems in the cognition and operation of the teaching mode combining micro-lesson and flipped classroom. The main manifestations are as follows:

a. The negative and vague understanding from some college leaders

Many of the reform projects in the field of education in China are strongly promoted by the Ministry of Education and education authorities, such as quality courses and quality resources sharing course construction, the national demonstration. The professional construction of higher vocational colleges, national backbone colleges, provincial schools, and the construction of individual schools are still in progress.

Almost all the national and provincial training projects have entered the comprehensive implementation stage with financial support from the state and provinces. At present, the departments of education of provinces and cities still don't have clear supportive policies and requirements. The understanding of the new teaching reform project is not in place or authorities hold a wait-and-see attitude. There is sometimes much resistance to promote the application of micro-curriculum.

b. Educators are satisfied with winning the prizes in the micro-lesson teaching competition, but they do not pay enough attention to the practical teaching application. Some college leaders and teachers are very interested in organizing teachers to win awards.

The schools attach great importance to their external reputation. However, the teachers are not paying enough attention to whether the competition really improves the teaching quality. The competition is only a means, not the ultimate goal of the competition. Students from different majors and regions have different thinking patterns, ways of presenting micro-lesson contents, and learning attitudes.

3. There is a lack of scientific evaluation system suitable for the combination of micro-lesson and flipped classroom

The teaching mode combining micro-lesson and flipped classroom has a good application prospect, which should have a matching and scientific teaching quality evaluation system. The traditional method is adopted to evaluate the teaching quality by taking learners' test scores, work level, and learning consciousness as indicators. The traditional evaluation methods are ignoring the influence of the teaching process on learners, only paying attention to learners' final exam scores. So, it is not comprehensive to evaluate the education and teach quality of

the teaching mode combining micro-lesson and flipped classroom teaching with the unified teaching evaluation method.

#### 4. The adaptability and role transformation of teachers and students

At present, the domestic primary and secondary schools are basically using the exam-oriented education model. Primary and secondary school teachers and students take passing entrance examination and entering a higher school as the goal. College students see passing the final exam as the goal. Many college students can get good results in the final examination by working overtime within 1 ~ 2 weeks. Initially, in colleges and universities students are given a day on average. About 60% of the time used for self-study and independent research is provided with good self-study conditions (library, Internet, stadium, community activities, etc.). In order to develop learners' autonomous learning ability, communication ability, social ability, and innovation ability. However, the exam-oriented learning methods and habits developed by college students in middle school have not changed much, coupled with the loose teaching and management mode, resulting in that college students' professional ability has not improved much, and the knowledge learned after the examination is almost forgotten. There are some problems in this teaching mode, such as the difficulty of teachers and students in changing roles.

### **Suggestions and Major Solutions**

It is necessary to popularize and apply the teaching mode combining micro-lesson effectively and flipped classroom and achieve the goal of improving the quality of education and teaching. It will be difficult to carry out this reform without addressing the existing problems of the soft environment and hardware facilities, especially the soft environment. Here are three levels of proposed solutions.

#### 1. It is suggested to make relevant supportive policies

It is suggested that vocational colleges formulate relevant policies to support the promotion and application of the teaching mode combining micro-lesson and flipped classroom. To provide certain financial support for the joint development and production of general courses, micro-lesson video of professional basic courses, flipped classroom, teaching plan, and corresponding teaching resources and other materials have to be provided. In addition, support the design and production of specialized courses with large enrollment into micro-lesson video, flipped classroom reference teaching plans, and corresponding teaching resources. Take out the strength and depth of quality curriculum construction. Supports the promotion and application of the teaching mode combining micro-lesson and flipped classroom in various majors.

#### 2. It is suggested to organize micro-lesson teaching competition with teaching effect evaluation

In terms of participating in the teaching competitions, each course design involves 20-60 micro-lessons, including a course of all micro lesson video, curriculum planning table or knowledge map, teaching plans, innovative subject, and student information). Micro course platform/site, the teaching procedure record information on the website), the course learning evaluation scheme, and overall assessment results (at least one class). The evaluation should be jointly participated by micro-lesson learners, experts, and peer teachers and non-peer teachers from other colleges and universities, each accounting for a certain weight.

#### 3. Colleges and universities put this work into teaching routine work organization and implementation

Various colleges and universities have gradually incorporated the teaching mode of combining micro course and flipped classroom into routine teaching work through pilot and application. According to the basic course, professional curriculum categories (science and engineering, liberal arts, medicine, etc.) should be distinguished and designed to produce based on the course characteristics and learner characteristics.

4. Colleges and universities should organize the training of teachers and learners on ideology, theory, and method

The teaching management measures urge teachers and learners to change their ideas as soon as possible. Furthermore, through training and guidance, teachers can master micro-curriculum design and production, flipped classroom teaching methods and other relevant teaching techniques and methods, guide learners to gradually adapt to the new teaching model type, and can change the previous exam-oriented education learning habits, improve the ability of independent learning, problem finding and problem solving ability and ability to innovate. Teachers and students work hand in hand to change their ideas and roles and jointly promote the effective implementation of teaching mode.

### Conclusion

In the process of research and experiment and promoting the teaching mode combining micro-lesson and flipped classroom, an assessment system should be developed to evaluate the teaching process of a flipped classroom, the improvement of learners' professional ability and performance, which cannot be assessed by traditional assessment methods.

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# Employing the Subsequent Four Years of the Libyan Education Reform Strategy: Administrations and Contributors

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## Abstract

This paper is the third continuation of the previously published paper “National Libyan Public Education Reform: Entire Transformative Strategies, 2020–2026” (November 2017), which proposes a complete framework for reforming Libyan public education and reflects on the difficulties that educators and learners have faced due to existing confusing conditions. It divides the entire reform plan into six years of gradual reform actions to overcome their complications; these complications stem from the discouraged forms of education, changeable curricula, bureaucratic schools and university administrations, the conservative community, and uncertain education strategies. Another factor is the way that learners acquire information (that is, their learning styles). In addition, upheavals all over Libya have affected the overall stability of education in Libya and led to there being two ministries of education (East and West Libya). Thus, six years of gradual reform stages were proposed so that a new generation of students would start with pre-kindergarten in the academic year 2026 or the equivalent. This paper also is subsequent to the prior published paper (16 May 2018) on the same reference project, “Contextualizing the First Two Years of the Libyan Education Reform Proposed Strategies (2020–2026): Targeted Candidates and Reflective Activities,” which explains in depth the suggested Phase I of the first two years (2020–2022) of the proposal for reforming Libyan education (2020–2026 or equivalent years). The purpose of this paper is to explain in depth the suggested subsequent four years (2022–2026 or equivalent years) of the proposed strategy of a six-year reform and come out with clearly constructed strategy without conflicting laws or regulations in the country.

**Keywords:** The second Four Years of Actions, Teachers' Colleges, HQs, Inspectors, Seiner Teachers, Curriculum Designers, Teachers' TV, MOE-database, Role of Social Workers, Expected New Generation, New Schools' Structures and Budgets

## 1. Emphasis on the Demonstrated Problem

As explained, frequent studies in various sectors of education have focused on areas associated with teachers and teaching practices. These areas are teachers' knowledge, classroom interpretations, teachers' beliefs on teaching, cultural situations, and how these areas connect to each other theoretically. Wilson (1999) shows that teaching is a practical activity; to be a teacher, one needs to be very practical. Teachers also must find ways of using theory

in the practice of teaching. This means that they must act within a community of other teachers; people do not learn in isolation, but as active members of society. What people learn and how they make sense of that knowledge depends on where and when they are learning, that is, the social context (172).

Elabbar (2011) points out that the “Libyan English teachers learned to be Libyan teachers in a particular social context, using a particular kind of knowledge at a particular time, therefore their practices are socially constructed.” The practices of Libyan educators have been constructed from their cultural background, their views on learning and teaching, and the kind of education they have received. Libyan educators are products of the way learning has been managed in the school or university context. These problems are exacerbated by top-down personal management and control; managers tend to consider all teachers qualified to teach any subject without specific training. This managerial expectation puts pressure on teachers to perform without providing the necessary training or professional development support (14–16).

Therefore, these four years of transformational actions are concerned with gradual policy reform, professional development, structural aims to put into practice the project’s main goals, and the anticipated results of Phase 1. An additional aim is to include contributors from schools, vocational sectors, and higher education to unify clear attitudes toward the change. The results of several studies (2011; 2013; 2016; 2017; 2018) have uncovered significant difficulties and deep complications influencing Libyan education. Most of these complications result from the following facts:

### **1.1. Education Policy Impairment: Schools and Universities**

The Libyan Education Authority (1995, 109) shows that the Libyan government provides policy statements detailing the aims of the school; for example, the "curriculum must cover all the activities in a school designed to promote the moral, cultural, intellectual and physical development of students, and must prepare them for the opportunities, responsibilities, and experiences of life and society." However, El-Hawat (2006, 215) and Elabbar (2016) explain that the school/university education systems are administrated by directors who apply whatever policy they personally feel is most suitable; this point has caused differences between schools, universities, and even faculties. Vandewall (2006) claims that "while educational development is still a priority for the government, the educational programmes in Libya suffer from limited and changeable curricula, a lack of qualified teachers, and a strong tendency to learn by memorisation rather than by reasoning, a characteristic of Arab education in general. Nonetheless, education is already free at all levels, and students receive a substantial salary" (40–42).

Also, the law in force (parliament decree) in the state of Libya (18-2010 verse 2) clearly enables the Ministry of Education to take all possible actions toward development, reform, or support of professional development among all education sectors. However, all these regulations did not end up applying in terms of conditions in reality:

- ☒ Libyan beliefs and the culture of learning have strong consequences on the educational process.
- ☒ Many teachers may find it hard to apply different ideas, methods, and methodologies to their teaching; some of them simply attempt to teach by the same methods they learned from their Libyan teachers.
- ☒ The age and gender of teachers (OGT and NGT) affect the academic collaboration among them, as teachers face difficulties of age and gender, which influence to a certain extent their professional relationships with each other.
- ☒ Lack of knowledge and skills development inside schools and public universities have an impact on teachers’ knowledge, how they perform while teaching, and their choices of teaching methods.
- ☒ Old and existing top-down approaches from the government, the Ministry of Education, and schools or universities may affect the inspiration that teachers exhibit for development or professional activities.

Latiwish (2003) also highlights that the Committee of Higher Education (now called the Ministry of Education) provides a list of normal policies for universities, such as the start and end dates of academic years, faculty



entrance scores, and the authorization of university heads and deans to other positions of academic management (25). El-Hawat (2006) shows that this method of administration has increased the gap between schools, departments, faculties, and universities. Some faculty deans try to apply their own perspectives and beliefs of managing to their faculties, such as choosing department heads for personal or social reasons. Also, some heads of departments or administrators require their teachers to follow their perspectives on selecting materials, methods of teaching, and even managing exams (382).

- ☒ Poor facilities and resources within the whole education sector have an impact on teaching and learning processes.
- ☒ Having to instruct large numbers of students affects learning and teacher performance.

Therefore—and as the previous phase suggests—key contributors from the Ministry of Education and administrators from the entire Libyan educational system should put into practice the targets of the whole project through connecting the participants of all six years to track reform procedures.

## 2. Literature Review

### 2.1. The Second Two Years, 2022-2024 Equivalent Years

The last published paper (Elabbar 2018) contextualizes the first two years of the suggested six years of the reform strategy. These two years of transformational and gradual change of policy aim to put into practice the project's main goals in addition to the anticipated results of Phase 1. They also aim to widely include contributors from schools, vocational sectors, and higher education to unify clear attitudes toward change. Elabbar (2018) also clarifies that all participants of the suggested Phase 1 should be invited to take a strong part in the second two years of developmental activities. Those officials invited to take part in Phase 1 are the following:

1. Government and parliament education policymakers (Education planners);
2. Ministry of Planning's officials in charge of preparing education budgets and policies;
3. Minister office management, deputy minister managements, and the Ministry of Education consultancies;
4. County administrations and developments directors;
5. Education developers, curriculum creators, and teachers' trainers;
6. Ministry of Education research and training center executives;
7. Ministry of Education legal administrators;
8. Ministry of Education general exams executives;
9. Deans of universities and faculties of educations;
10. Senior inspectors and their TAs; and
11. Key people (decision makers) from the Ministry of Education, government, and parliaments in charge of education management in Libya (169).

The main goal of involving such officials in this four-year stage is to ensure the implementation of the main goals of the reform project for 2020–2026. Also, it will facilitate the interaction with the four years of contributors to join the efforts of the targeted continuing professional development strategies (CPDS).

### 2.2. Continuing Professional Development (CPD) Brief Summary

CPD can be seen as offering a systematic way of improving and developing educators' knowledge, perspectives, beliefs, and skills during their lifelong careers as educators. The Institute of Professional Development (2006) defines CPD as combinations of approaches, ideas, concepts, and techniques that help teachers manage their own learning and development (20). Rodrigues (2004) writes that “CPD is any process or activity that provides added value to the capability of the professional through the increase in knowledge, skills and personal qualities necessary for the appropriate execution of professional and technical duties, often termed competence” (11). Bell

et al. (2001) states that teachers can "review, renew and extend their commitment as agents of change to the moral purposes of teaching; and through this they acquire and develop the knowledge critically, beliefs, skills, and emotional intelligence important to excellent professional thinking, planning, and practice with children, young people and colleagues throughout each phase of their teaching lives" (p.4-6).

Lange (1990) also shows that it is a "process of continual intellectual, experiential and attitudinal growth of teachers," which is essential for maintaining and enhancing the quality of teachers and learning experiences (250). Rodrigues (2005) explains that a teacher's CPD shifts to meet accountability and credibility demands, as it is planned to enhance teachers' self-confidence, overall competence, and language of teaching or pedagogical content knowledge by providing instruction on the fundamental themes and perceptions in the teaching process (387–391). Kanu (2005) also suggests that CPD serves longer-term goals and seeks to facilitate the development of teachers' understanding of teaching as well as understanding themselves as educators (499).

### **2.2.1. Process of CPD: Schoolteachers**

The process of teachers' CPD may be anything that helps teachers develop their skills and teaching beliefs to improve their teaching performances. Rodrigues (2004) shows that the aims of CPD from a second or foreign language development perspective can cover any of the following: the process of how second/foreign language development grows; learning how roles transform according to the kind of the learners being taught; reviewing theories and principles of foreign language teaching; determining learners' perceptions of classroom activities; developing an understanding of different styles and aspects of teaching; understanding the sorts of decision making that occur during foreign language lessons; and building awareness of instructional objectives to support teaching (5–6). Also, Rodrigues et al. (2005) state that "teacher development is more involved with in-service teacher education. It relies more on teachers' personal experiences and background knowledge as the basis of the input content, and typical teacher development activities through their teaching career," as it includes "teacher study groups, practitioner research, or self-development activities" (390). Guskey (2009) reports on the strong relationship between teachers' CPD and their students' outcomes and practice (490). Similarly, Guskey (2002) offers four models of professional development as vehicles for changing teaching practice, leading to improvements in student achievement and outcomes, and changes in teachers' beliefs and attitudes (382).

### **2.2.2. CPD in Higher Education**

The role of CPD in the field of higher education is explained by McWilliams (2002), who points out that the term "continuing professional development" is widely used across a range of occupational fields: "There is, however, a lack of clarity and agreement about how it is defined, and some acceptance that the concept is 'neither innocent nor neutral'" (289). Deem et al. (2008) states that within the context of higher education, professional development for academics occurs within a complex situation of changing national policy "directives," increasing demands on both institutions and academics themselves (116). Also, Blackmore and Blackwell (2003) show that the CPD of academics can be seen as taking place within a complex "array of competing challenges and perspectives." The nature of the academic role and the responsibilities attributed to it are changing, along with the relationships to other roles both within and outside the institution (22). Dill (2005) claims that "[i]t is equally...[i]mportant for the continuance of the university as we know it that we look systematically and critically at our own professional behaviour, at our structures of university self-governance, at our processes for peer review and at our underlying academic beliefs" (178).

The Higher Education Academy (2006) states that CPD can be seen as "systematic, on-going, self-directed learning. It is an approach or process which should be a normal part of how you plan and manage your whole working life." Clegg (2003) argues that the "problem of CPD of professionals in higher education is that it operates around a series of unresolved tensions" and goes on to explain "fault lines in conceptualising." Clegg (2003) also explains that there are two "dualisms" in respect of what is considered appropriate for the content and focus of CPD in higher education, which reflects characteristic influences on academic identity. These

dualisms form the “research-teaching nexus and the tension between loyalties to the subject discipline and the organization” (37–38).

### 2.2.3. Strategies for CPD

Lo (2005) shows that “Professional Development should go beyond personal and individual reflections, for example, it can include exploration of new approaches and theories in language teaching” (140).

The UK's Department for Education and Science (DFES) (2000) suggests that CPD strategies should suit the needs of policymakers and funding and university managers and increase teachers' pedagogic and knowledge skills. Also, CPD strategies should increase and progress teachers' individual performances and develop their teaching beliefs and abilities. It consequently involves much more than just training courses. However, while many things can be learned about teaching through self-observation and critical reflection, many cannot. These include subject matter knowledge, pedagogical expertise, and understanding of curricula (126–127). The Architects Accreditation Council of Australia (2009) writes that formal CPD activities "should be structured in a learning environment with structured learning outcomes or assessment" (1). They also assume that formal CPD activities should include faculty seminars, workshops, courses, conferences, and presentations, among other activities. Informal CPD activities should, however, consist of a self-directed study of practice, such as reading technical magazines, making site visits, attending talks and presentations by peers, and participating in mentoring programs (3).

### 2.2.4. Applications of CPD

CPD management and organizations should consider several concepts. Bell and Gilbert (2001) determine three: the personal concept, the occupational concept, and the social concept. The personal concept covers teachers' values, attitudes, beliefs, and motivations. The occupational concept encourages a connection between theory and practice in addition to the essential focus on academic stimulation and professional relevance. The social concept encourages the relationship between individuals and groups (159–160).

Clegg (2003) also shows that to understand the influences on CPD at individual and institutional levels, it is essential to take account of these debates as well as the significantly diverse approaches that different academic disciplines take to CPD (42). Crawford (2009) points out that these differences can be seen as "evolving from epistemological sources with academics being positioned within many systems or communities, each of which may have different discourses, approaches to teaching and learning, understandings of CPD and priority." Besides the changes related to the meanings attributed to CPD, there is also an obvious difference in the appropriate form and approach to CPD activity. The core of the matter can be seen to pivot on whether CPD activity includes formal and informal approaches to learning in the workplace (165).

## 3. Proposed Actions

### 3.1. Teachers Colleges (TCs)

The reform's main aims need to consider how future teachers gain and develop their pedagogical content knowledge (PCK). TCs will also require having working classroom equipment, teaching aids, IT systems, modern laptops, online library access, and well-trained educators who can apply the reform's main goals; to this aim, they (TC educators) should have taken part in Phase 1 (2020–2022 or equivalent years) preparations. As the pre-service educators, teaching assistants should learn about student centers, decentralized forms of education, and getting the new student-teachers ready for the transformation. TCs syllabuses should also cover core materials, ground-up activities, app communication, and practical aspects; all preservice and student-teachers should get enough time to practice PCK before they take part in the reform arrangements.

These practices might take several methods or platforms, such as at schools' locations, laptops, libraries, or short-term external training facilities. TCs are a significant part in formulating teachers with clearly planned ideas of

the change. In other words, TCs must play an important role in implementing the reform's main goals. TCs will have to work to adjust their syllabuses, teaching methods, and teaching aids and move from centralized to decentralized forms of education as well as administration.

### **3.2. Ministry Training Centers (MTCs)**

MTCs must play an important role in collaboration with TCs in applying CPD reform models, such as national teacher training programs, action research, coaching, cascading, and transformative training to the suggested contributors. MTCs should also collaborate with international universities and research centers that have gone through a reform process. Correspondingly, MTCs must shore up the development process toward the involvement of the in-service teachers, inspectors, school headquarters, education administrators, and social workers to participate in contextualizing the transformation goals.

### **3.3. Teachers' TV (TTV)**

This managed channel (both TV and internet) aims to help pre- and in-service educators keep up with fundamental development activities and track all preparation stages. Those teachers will then have excellent opportunities to watch all training sessions, recorded reform lectures, lesson plan activities, communicative learning manners, and teacher education; they will be able to see the importance of material design, action research, and transformative knowledge. Also, it will be further recommended to prepare an app (phone app) where all reform contributors track reform constrictions. This process will ensure an intensive look at the trajectory of the improvement.

### **3.4. Curriculum Designers**

Those designers require intensive professional development regarding material development and adaptation to be able to achieve the following goals of the reform:

- Making a core curriculum for the new generation of pupils who will start in 2026–2027. This core curriculum would include reading, writing, math, science, technology, Islamic studies, English language, French language, and citizenship.
- Making a peripheral curriculum: history, music, arts, social studies, and physical education.
- Making gradual modifications for the current students to enable classroom interaction, shared work, and technology adoption.
- Giving spaces in the teachers' books to enable teachers to develop activities and use ground-up activities.
- Requiring the university syllabus to meet the reform preparations in terms of content knowledge, use of technology, and forging languages.

### **3.5. Debates**

Debates and workshops must frequently occur within all levels of contributors and reform administrators to overcome unanticipated constraints that may happen during the reform journey. Also, these debates should be well administrated in terms of outcomes, bottom-up debates, and top-down debates to enable all contributors to increase their philosophies either through direct participation or through teachers' TV or apps.

### **3.6. Role of Social Workers in the Change**

Social workers are significant in the change and should be extensively involved within all practical activities. As they will be required to further connect with the traditional Libyan teachers, parents, and students, they would be trained on preparing the families and students to accept the gradual change.

#### 4. Current Education Budget, Numbers, and Expectations

According to the ministry's published report (2015), over the past 17 years, Libya has spent an annual budget of approximately 1.3 billion Libyan dinars (approximately US\$1 billion) for the Ministry of Education alone and without a clear developmental policy. This unplanned budget has led to confusion, as it was not used to build a strong base for approximately 1.4 million school learners (201000) in the vocational sector and approximately 435,000 university students. Nevertheless, Elabbar (2016) explains that with a huge budget and a small population, most of the current classrooms consist of 45 to 50 students each. This number does not agree with the large number of assigned teachers (on documents only, 745,000), which means approximately one teacher for four students. Thus, part of this project's main aims is to use such a budget in the six-year reform plan. For example, Maghaib's (2017) statistical report based on the national ID system shows that by 2021, the entire Libyan population is expected to reach 6,785,839, with an annual growth of 1.3 and fertility rate of 2.315. Thus, Libya will have approximately 581,458 new children aged between 0 and 4 years (68).

#### 5. Predicted Structure, Budget, and Policy

This phase would come as a result of the two prior phases (Phases 1 and 2). It aims to prepare students who are suggested to start the academic year 2026–2027 (pre-k). Those learners are anticipated to be approximately 504,000 pre-k students. This phase also aims to implement the goals of this project, which are creating a modern learning environment and having well-equipped classrooms (no more than 20 students per class), well-trained teachers, and HQs; these goals can be achieved through a well-organized county system that applies the aims of this project as framework procedures. Therefore, the number of expected required new classrooms will be approximately 29,073. Maghaib (2017) anticipates the cost of a well-equipped classroom (according to US standards) to be approximately US\$60,000 per class, which means approximately 2,325,832,000 Libyan dinars (approximately US\$2.1 billion). This study also anticipates that the annual cost of each student, including administration, teachers, training, transportation, equipment, carting, and school supplies, is approximately 20,000 Libyan dinars (US\$17,500).

Thus, the total anticipated or required annual budget for the new reformed education with teaching and administration will be approximately US\$104,6624,4000, which is approximately 1.6 billion Libyan dinars every year, plus the cost of adding the required classrooms.

#### Conclusion

This framework proposal has aimed to open doors for key Libyan education figures to analyze ideas of reforming a complicated learning context. It considers the current position of Libyan educators, policymakers, and the difficulties they face because of having used an unstable system for more than 47 years. This proposal also considers different models of CPD, cultural reflection, current students, and economic thought based on the currently addressed budget in the state of Libya. Most of the suggested aims have been designed to be linked to or modified in the face of wider ideas of reform of the complex situation in Libya. Libya and Libyans deserve better educational development and collaboration to achieve anticipated reform and targeted outcomes.

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# Assessment of Acquaintance Techniques at the First Meeting of Adult Education

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## Abstract

The knowledge and the skills acquired in basic education are not sufficient for the entire life as technological and social conditions change rapidly. The solution to this problem is adult learning actions. An essential component of these actions is the first meeting. In order for this process to be implemented without difficulties, the literature provides some techniques. This study assesses these techniques and to highlight their particular characteristics in order to clarify which one is best for each educational program. For achieving this, these techniques are sought in the literature and evaluated by specific criteria. Finally, 15 techniques have been found, differentiating about time, space and media, secondary goals, and the dangers they pose. Based on these data, the adult trainer can choose the most appropriate technique for his educational program.

**Keywords:** Acquaintance Technique, Adult Education, Assessment, Evaluation, First Meeting, Lifelong Learning

## 1. Introduction

It many cases the adult trainer has difficulty in making the members of the educational group knowing each other. Furthermore, many adult educators use always the same techniques, which lack originality and make the educational process less interesting. It is therefore useful for the adult educator to know many acquaintance techniques which make the educational process more pleasant and effective. This knowledge is important because time is generally limited, and in a short time, the trainees have to learn each other. This procedure is crucial in establishing a good educational climate.

It is generally accepted that the knowledge and the skills gained from basic education are not sufficient for the needs of life and the profession. Therefore, there is a need for an update. For this to be achieved, adult learning actions are being implemented in the context of lifelong learning.

According to the Greek law, “lifelong training” is defined as “training and retraining of human resources, which in the context of initial vocational training provides basic professional knowledge and skills, for integration, reintegration, occupational mobility into the labour market and the overall development of human resources. In the context of Continuing Vocational Training, complements, modernises and/or upgrades knowledge and skills

acquired by other vocational education and training systems and/or work experience, with a view to integrating and/or reintegrating into the labor market, guaranteeing work, professional and personal development" (Government Gazette, 2005). The concept of "lifelong learning" is wider than the term "education," and that implies the continuous and endless nature of learning (Papadimitriou, 2014).

The first meeting is of great importance in adult education and determines the outcome of the educational process (Tsioli, 2005). It is the first trainers encounter with the trainees. According to Galanis (1993), the first contact of the instructor with the members of an educational team is crucial for the outcome and the success of the training program. In this meeting, key actions are taking place. In particular, it sets the foundations for team collaboration, builds communication channels among the participants, shapes the climate in which the educational process will take place and, finally, leads to the draft of the "learning contract." A doubtful first meeting can have a significant impact on the smooth progression of the program and can lead to failure.

The objectives of the first meeting of adult education are of great importance (Mouzakis, 2006; Papanis, 2008; Psachou, 2010). The initial meeting is designed to reduce the stress and anxiety of learners and to establish a pleasant climate of confidence that promotes learning. So, they must have the opportunity to speak and express themselves and have all their questions answered. Furthermore, the trainer must get to know the trainees, and the trainees must get to know each other. Another goal is to explore the expectations and needs of learners as well as the particular learning methods they prefer. Lastly, the learning contract must be drafted by the interaction between trainer and trainees.

More specifically, the planning for the first meeting must take into account the characteristics of the trainees, their needs, and their expectations. Initially, the acquaintance of the trainer with learners and between learners themselves is encouraged. The trainer usually presents himself by mentioning some information about himself (studies, occupational status, interests, etc.), followed by trainees in the same pattern. For the acquaintance of the members of the group, various techniques have been proposed such as self-presentation, acquaintance with couples, chain, characteristics, etc. (Archondaki and Philippou, 2003; Marcheli, 2009).

Then, follows the detection of the training needs of participants, which can be done orally or by writing with a structured questionnaire. Each trainee states what he expects from the learning process, what are his objectives, what educational gap intends to cover, and where he is going to use the acquired knowledge. Also, it is worth discussing the barriers to learning, which the trainees employ, and how can these be solved or addressed, for the learning process to go forward without problems. The information provided is recorded to be used properly. The investigation of educational needs is an important task in adult education and affects the success of the learning programme (Tsimpoykli and Phillips, 2010).

Finally, the next and last phase aims at the preparation of the learning contract. The term "contract" is used to show the commitment by both sides regarding the fulfillment of the agreed points. In learning contract, the organisation of the learning process is discussed. On the one hand reflects the intention of the instructor to organise the process in a certain way and on the other, the acceptance of learners (Rogers, 1999). The learning contract includes a diagnosis of the learning needs and expectations of learners, the definition of the programme objectives, the determination of the functioning rules of groups and the group and individual evaluation (Tsimpoykli and Phillips, 2008). For the preparation of the learning contract, the information will be used that gained during the first two stages of the process.

The initial actions that we can apply to a learning program, apart from the acquaintance techniques, may cause team building, assess the knowledge and the experience of participants and result in the direct involvement of participants in the educational process (Silberman and Biech, 2015).

From the above, it becomes clear that the acquaintance between instructor and learners and between learners themselves is an essential element of the first meeting and must be implemented in the best possible way. It is evident that the instructor of adults should have an in-depth understanding of acquaintance techniques, to apply the appropriate one.

## 2. Method

The purpose of this study is the discovery of acquaintance techniques that the adult trainer can use in the first meeting of adult education, as well as their characteristics, that show which technique is the best in each case. This study aims to provide the adult trainer with all the information that is necessary to make the optimal choice, depending on the nature of the educational process, the characteristics of the learners and the resources available. In order to find acquaintance techniques in adult education, a search at related books and journals is conducted. Then the findings are recorded and assessed according to some parameters.

Initially investigated the time needed for implementation, i.e., how much time the specific technique requires to be used in a specific group. We have to highlight that the necessary time varies depending on the group size and other parameters. However, a rough value can be provided. The activities are divided into short duration, when, in general, can be implemented in 15 minutes or less (1/3 of the lesson time), medium duration, when can be completed in 45 minutes (a lesson time) and long-duration when they require more time than a lesson time.

Other assessment parameters are: available educational space required for conducting the activity and the means and the materials that are required. Furthermore, some activities require teamwork (the whole group works together), while others can be done in couples or even individually. So they are classified accordingly.

The primary objective of acquaintance techniques is the trainer and the trainees to get to know each other. However, there are co-benefits, such as the promotion of communication, participants activation, the achievement of non-verbal communication, and detecting emerging issues and desires. Some techniques may have a positive impact on other objectives of the first meeting as the clarification of objectives. In addition, the potential risk of this techniques is identified.

## 3. Results

The search resulted in fifteen acquaintance techniques, which are described below (Galanis 1993; Markelli, 2009; Archontaki & Philippou, 2003; Tsimboukli, 2012; Tsimboukli & Phillips 2010).

### Party

Participants meet informally before the start of the educational process in a bar or another similar place. So there they have plenty of time to discuss, to come closer and to get to know each other. This technique is beneficial when the educational process is too short in duration, and there is no time for acquaintance techniques.

### Letter

The participants of the educational process are self-presented as if they complement a letter. The data that are presented are name, job, marital status, and interests.

### Self-presentation

In this technique, the trainer presents himself by providing information about his educational and professional career as well as personal details and experiences to create intimacy. It provides an opportunity for the asking questions. Then, the trainees present themselves.

### Getting acquainted with couples

The trainer invites the participants to form pairs. Then, he asks each one to interview the other member of the pair. Consequently, each participant presents to the team the other person of the pair. The information that is provided is the educational and professional background and the reasons for participating in the educational process.

### Chain

The first participant says his name. The second says his name after saying the name of the first participant. Each participant says his name after he has mentioned the names of all the previous participants. The trainer takes part last.

#### Characteristics

Each participant writes on a paper some information, e.g., the name of a favourite movie or favourite food. Then the trainer searches and finds people with common characteristics. After he discusses for a few minutes, he tells the team what the common characteristics are and why these preferences exist.

#### The ball

The participants form a circle. The first trainee tosses the ball to someone else while saying his name. The participant who receives the ball is doing the same, and the process continues until all receive the ball. In the second stage, the participants change position in the cycle, and the process is repeated.

#### The recommendations

The trainees are asked to walk randomly in the room. When they meet another person, they introduce themselves by saying their name. Then they continue walking. In this way, the participants get to know each other quickly.

#### The box with the name

The participants form a circle. Somebody with his hands forms an imaginary box. Another person opens the box and pulls out the name and tells it to the others.

#### Tell it with a motion

The participants form a circle. One of the participants enters the centre of the circle and says his name while he makes a move. The rest participants observe the movement and try to repeat it. The participant, who is in the circle, observe the imitation and invites the guy who implemented it better to enter the circle and continue the game. Because in this technique, the participants express themselves with the body, some may feel uncomfortable. A good idea is to start the trainer first by making an excessive movement.

#### I know that... I guess that ...

A participant chooses someone who does not know him well, and says what he knows about him and then what guesses for that particular person. The people to whom he refers, can at the end correct any mistakes that have been made. Then the next person is chosen, and the game goes on until everyone has participated.

#### The initials

Each person draws his initials on a piece of paper. After that he draws a picture using the initials. At the end, everybody presents the painting to the group. This technique is useful when the activities of the meeting include painting.

#### Convey the message

Each trainee takes a piece of paper and writes his name. Next, he starts walking in the room. When he meets another person, he gives him the paper with the name, and he provides three pieces of information about himself. The other person does the same. When he meets someone else, she gives him the paper with the name and says the information he had been given. The procedure is repeated many times.

#### Name stories

The participants are divided into couples. Everybody talks for a while about his first name, e.g., why it is given to him, if he likes it, etc. Subsequently, the other person presents to the group what he heard.

#### Expectations

The participants are divided into couples. Everybody talks about his name and what he expects from the team. Then together form a circle, and everybody tells what he has been told. To avoid repetitions, the results are presented in table form (table 1).

Table 1 Assessment of acquaintance techniques

Technique	Duration*	Group	Space	Means Materials	Other Objectives	Dangers	Comments
<b>Party</b>	No time	The whole group				Communication	Appropriate activity when there is no time to get acquainted in the program
<b>Letter</b>	Medium	The whole group					
<b>Self-presentation</b>	Short	The whole group					
<b>Getting acquainted with couples</b>	Medium	Couples			Communication, activation		
<b>Chain</b>	Short	The whole group				Some may feel discomfort if they do not remember the names of the other trainees.	
<b>Characteristics</b>	Medium	The whole group		Paper, pencils			
<b>The ball</b>	Short	The whole group	Big without obstacles	Ball or some other similar object	Activation		
<b>The recommendations</b>	Short	The whole group	Big without obstacles		Activation, non-verbal communication		
<b>The box with the name</b>	Medium	The whole group			Activation, non-verbal communication	Personal issues may emerge	
<b>Tell it with a move</b>	Medium	The whole group			Activation, non-verbal communication	Individuals are exposed with their body	
<b>I know that ... I imagine that...</b>	Long	The whole group			Communication		
<b>The initials</b>	Long	The whole group		Paper, paints, markers	Communication, emergence of topics		Suitable for painting activities, because the participants get familiar with materials
<b>Convey the message</b>	Medium	The whole group		Paper, pencils	Activation, Communication, Communication		
<b>Name stories</b>	Long	Couples			Emergence of desires topics, clarification of objectives, communication		
<b>Expectations</b>	Long	Couples					

(\* ) short duration <=15 minutes, medium duration<=45 minutes, long duration >45 minutes

#### 4. Discussion

From the methods described above, the "self-presentation," the "chain," the "ball" and the "recommendations" are brief and can be implemented in less than a third of the teaching hour. The "party" technique requires no time all as it does not influence the seminar schedule. The "acquaintance in pairs," the "characteristics," the "box with the name," the "tell it with a move" and "convey the message" can be implemented within a teaching hour. The remaining techniques, "I know that / I imagine that," the "initials," "name stories" and "expectations" require more time than a teaching hour.

Some techniques such as "getting acquainted with couples," "name stories," and "expectations" require work in couples. On the other hand, the other techniques are implemented in the whole group.

Most techniques have not specific demands regarding the room size and the means they need to be implemented. One exception is the "ball." This technique requires large open space so the trainees can throw and receive the ball. Another exception is "recommendations" where adequate space is needed to enable the participants to walk seamlessly. Particular materials require "characteristics" and "convey the message." The former requires paper and pencils, and the latter requires coloured pencils and markers. Finally, "the ball" to be implemented requires a soft ball or another soft object that can effortlessly and safely be tossed to learners.

The primary objective of all techniques mentioned above is the acquaintance. Some of them have additional objectives. The techniques "getting acquainted with couples," "I know that / I imagine that," the "initials," convey the message," "name stories" and "expectations" promote communication, which is a basic feature of the interaction in each relationship (Olympic Training and Consulting, 2016). On the other hand, the "recommendations," the "box with a name" and "tell it with a move" promote non-verbal communication.

Almost all techniques, more or less, give the participant an active role. There are also techniques such as "the initials" and "expectations" in that desires to emerge. Finally, "expectations" also helps to form the objectives of the meeting, and that is regarded as a significant contribution to the learning process.

Finally, some techniques are associated with risks. The "chain" may cause discomfort when the trainee is unable to remember the names of the other participants and the "box with the name," where personal issues can emerge. Risky is also the "tell it in a move" because it requires movement and can cause embarrassment as participants are physically exposed.

## 5. Conclusion

Undoubtedly one of the requirements of the adult first meeting is trainers acquaintance with trainees and the acquaintance among the trainees. The acquaintance is a critical step in the group formation, an essential task for the smooth progress of the educational process. As it has mentioned the bibliography provides a range of methods through which the requested objective can be fulfilled. These methods vary depending on the time they require to be implemented, how the group works (the whole group altogether, in couples, individually), the free space needed, the materials and the means that required, and the dangers that are present. It is up to the adult educator to choose the right technique depending on the subject he has to teach, the participants characteristics and available means.

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# Early Childhood Education Teachers' Perceptions on the Use of Play as a Teaching Technique in Afadjato South District of the Volta Region, Ghana

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## Abstract

The study investigated the perception of early childhood educators on the use of play as a teaching technique in the Afadjato South District. The study was a cross-sectional descriptive design using concurrent triangulation mixed method approach. A sample of 120 participants was used comprising 100 kindergarten teachers, 10 basic school heads and 10 school supervisors. Purposive, simple random and convenience sampling techniques were used to select the participants. Questionnaire and interview guide were used to collect data. Descriptive and inferential statistics were used to analyse the quantitative data while thematic analysis was used for the qualitative data. The findings showed that early childhood teachers in Afadjato South District had positive perception on the use of play as a teaching technique. Kindergarten teachers' perception positively influenced their use of play as a teaching technique. Among other factors such as availability of play materials, the kind of motivation teachers received as teachers influenced the use of play as a technique of teaching. Teaching experiences were the most influential factors to kindergarten teachers' use of play as a teaching technique. It was concluded that early childhood teachers in Afadjato South District had good intentions on the use of play as a teaching technique. Also, kindergarten teachers' could use play as a teaching technique depending on their perception towards play. Moreover, factors that contributed to kindergarten teachers' use of play as a teaching technique were: availability of play materials, the kind of motivation teachers receive and their teaching experiences. It was recommended that through in-service training, head teachers should encourage early childhood teachers in Afadjato South District to continuously have positive perception towards play as a teaching technique. Also, personnel in charge of supervision at the Afadjato South District Education Directorate should educate kindergarten teachers to use play as a teaching technique.

**Keywords:** Early Childhood Education, Teachers, Ghana

## Introduction

The influence of globalisation of education systems from early childhood education to higher education has been under enormous pressure to reform. Many countries undergoing educational reforms have referred to

international research findings and trends to create new pedagogy to meet those trends. Children in literate and non-literate cultures play regardless of their strength, challenges, mental health, socioeconomic status, and parenting. Play is a crucial component of an appropriate early childhood classroom. The past decade has seen an increase in research documenting the benefits of children learning through play. However, in the global world, the amount of play in American kindergarten classes, for instance, remains on a steady decline (Eberle, 2011). Play research has witnessed a rise in two seemingly contradictory trends. First, research increasingly shows that play expedites a variety of social, cognitive, motor, and linguistic improvements (Eberle 2011; Fisher et al. 2011). Social play allows children to become more creative and more adept at explaining meaning verbally, they are more successful at manipulating different symbol systems, and more confident when experimenting with new activities (Bjorklund & Gardiner 2011; Eberle 2011; Pellegrini 2011). In school settings, teachers gently guide play, using play-based teaching and learning activities to promote curricular goals while maintaining the critically important aspects of play such as children's intrinsic motivation to engage in play (Bodrova, Germeroth, & Leong 2013; Eberle 2014; Fisher et al. 2009).

Second, and ironically, in spite of the many benefits of play recognized by academics, recent years have seen a steady decrease in the amount of time kindergarten classes devote to play (Brownson et al. 2010; Frost, 2008; Meisels & Shonkoff, 2000). Past research has well documented the challenges public school kindergarten teachers face in implementing play in their classes and the shift towards more academically focused kindergarten teaching. The early years of human life provide a unique opportunity for social and cognitive investment, but at the same time, this is the most vulnerable period for all forms of stunting in development if holistic development is not nurtured (Brownson et al. 2010). Froebel (1987), writing on children's play contends that, play is not only the children's natural occupation before constraints and formal schooling takes over, but it also serves as a major means by which children use to communicate to themselves and to the world around. Children's play and teacher's involvement in play activities have received recognition and attention by philosophers and educationist for centuries (Froebel, 1987).

The activity of play in kindergarten is crucial to the development of children (Graue, 2009; Miller & Almon, 2009). With obligations to fulfill mandates such as "No Child Left Behind" (Lee, et al., 2006) and pressure to meet state and national standards, teachers are continuously decreasing the amount of play-centered activities in kindergarten classrooms. However, it is important to incorporate play into the curriculum for the development of children. Miller and Almon (2009), discuss that, "the traditional kindergarten classroom that most adults remember from childhood-with plenty of space and time for unstructured play and discovery, art and music, practicing social skills, and learning to enjoy learning-has largely disappeared" (p.42).

Much has been written about the cognitive, social, emotional, and language benefits of play, as well as the types and stages of play that take place in early childhood classrooms. Both the Association for Childhood Education International (ACEI) and the National Association for the Education of Young Children (NAEYC) recognize and uphold the need for play as an essential part of early childhood education (Bredekamp & Copple, 2009). The theories of Piaget (cognitive and physical development) and Vygotsky (socio-cultural experiences) describe playing for children as optimal learning times (Elkind, 2004). Brain research also supports the importance of play during the critical periods of brain growth during the preschool years (Healy, 2004). The language supports symbolic thought in the play setting and is seen as a vehicle for the development of self-regulation, cognition, and social competence (Bredekamp & Copple, 2009).

Today, the play seems to have taken a backseat in kindergarten to teacher-directed instruction based on the belief that the latter is more effective than the former in preparing children to perform well on standards-based assessments. Graue (2009) explained this by stating, "it seems expectations have evolved without a clear sense of purpose or of the needs of the children. The current focus on benchmarks and achievement has focused effort on what is tested rather than what is learned" (p. 30). This describes common practices seen in most kindergartens today (Ashiabi, 2007). In some kindergartens, the focus is mainly on drilling students with information that they need to know to meet expectations, with little time for play. Because of the expectations and standards that must be met, many teachers do not allow time for play, or only allow time for play if all material for the day is covered (Graue, 2009). However, teachers may not take into consideration the benefits of

play for the development of children. Warner and Parker (2005) expressed that, "Play is healthy and in fact, essential for helping children reach important social, emotional, and cognitive developmental milestones as well as helping them manage stress and become resilient" (p. 2). Therefore, it is critical for teachers to understand the importance of play in improving stress management and social skills, as well as to feel empowered to integrate play based learning activities in their kindergarten instruction (Ashiabi, 2007).

Ghana is among African countries that gave Early Childhood Development (ECD) programme a minimum attention in the past three decades. During this period, the children's early learning and stimulation were informal and unstructured. The absence of the formal Early Childhood Education (ECE) programmes made children below eight years invisible in the country's education programme, a situation that denied children the opportunity to thrive both academically and socially. In the year 2007, a policy document on Early Childhood Care and Development for Ghana was made operational. The document forms part of the recommendations of the Government's white paper on Educational Reforms, makes kindergarten education progressively part of the Universal Free and Compulsory Basic Education. Under the policy, all Ghanaian children at the age of four are to receive two years of compulsory Early Childhood Development (ECD) education before entering primary one. Early childhood is the period of a child's growth from conception to the first eight years. This was contained in a speech delivered by the then First Lady Mrs. Theresa Kufour when she was opening the International African Conference on Early Childhood Development in Accra on the theme: "Moving Early Childhood Development Forward in Africa" (GNA, 2005). The most convenient way of assessing whether teaching in ECE is friendly and relevant to the child is through the teaching and learning strategies. Strategies and methods used by both teachers and pupils in teaching and learning are vital in the promotion of self-mastery of skills and concepts, especially at this tender age (Ashiabi, 2007).

In a child-centered kindergarten, teachers incorporate play into the daily curriculum. Students have the opportunity to explore their learning environment by means of free-play as well as through teacher-initiated play. Free-play is a play that is initiated by the child (Graue, 2009). Furthermore, free-play allows children to develop social relationships with other students, the opportunity to choose their own level of challenge, and the overall ability to make their own decisions (Ashiabi, 2007). Teacher-initiated play is where the teacher is involved in the interactions between students. The teacher is there to provide feedback, extend conversations, and bring in appropriate resources (Graue, 2009). With the focus on play-based learning, students continue to grow and develop appropriately as well as meet the expectations expected of them (Miller & Almon, 2009).

Early Childhood Education must support children to develop the ability to work and communicate their own impressions through creative processes with various forms of expression. The Ghanaian Pre-school curriculum is very flexible in terms of lesson content, coupled with the absence of external examinations to assess pre-schoolers' eligibility for primary school education (Ashiabi, 2007). The play has been described as a vehicle for learning, especially in an early childhood setting. This implies that for effective learning, play must be incorporated in ECE programs. Since teachers are key determinants of the experiences that children are exposed to, it is necessary to ascertain whether they embrace the use of play as a teaching technique in Ghanaian Kindergarten (Ashiabi, 2007).

After making Kindergarten Education compulsorily part of the formal school system in 2007, the Ministry of Education has continued to put emphasis on the use of child-centered teaching techniques that includes the use of play as a teaching approach in both indoor and outdoor learning activities. For most people, the fondest memories in school and outside of school were the times that they were involved in activities that incorporated play. One remembers kindergarten as a happy place one went, where one rarely sat at a table or desk. It was a place of creativity and fun. There was an abundant amount of art supplies, books, and an entire room with blocks, toys, and balls. Kindergarten was a place to interact with others and begin friendships (Eberle, 2011). Ironically, it is hard to imagine being a child in the kindergarten of today. There is a constant pressure and rush to finish work, meet standards, exceed milestones, and not be left behind. A metaphor that perfectly illustrates many kindergartens today was provided by Graue (2009), "Several ways exist for planning a trip. One way is to find a destination and get there as quickly as possible. The trip is all about being there, not getting there. It puts the race ahead of the journey" (p. 30).

Today, there is constant pressure put on kindergarten pupils and teachers to succeed and tackle milestones; however in the process, play is being pushed out of kindergarten in order for students to rush toward the acquisition of skills or knowledge without consideration for how the process of learning itself can lead to more important outcomes in addition to the targeted skills or knowledge (Graue 2009). Lyabwene (2010) conducted a study in Tanzania on how pre-primary school teachers' professional qualifications significantly affected the quality of classroom interaction. Complaints are raised by different ECE stakeholders on the unaddressed pedagogical challenges, especially teachers' tendency of using compulsive, direct, and unfriendly teacher-centered teaching strategies (United Republic of Tanzania {URT}, 2008). The case of Ghana is similar to that of Tanzania based on several reports from Non-Governmental Organizations (NGOs) including Sabre Charitable Trust, United States Agency for International Development (USAID), The Right to Play and many others. In spite of the government of Ghana's strong policy commitment to the kindergarten sector, it continues to face challenges of access and quality. The needs at this level are significant, whereas learning materials are in short supply: almost half of all kindergarten teachers have never received any formal training (Ministry of Education (MoE), Ghana 2013 cited in Sabre Charitable Trust country report November 21, 2017). Also, another NGO called The Right to Play reports that early childhood educators still face curricula and pedagogical challenges and there is a discrepancy between the emphasis and the teaching techniques at the kindergartens (Right To Play Ghana, 2016).

A visit to some kindergarten schools in the Afadjato South District by the researchers indicates that, the play seems to be on a lower side as far as teaching and learning are concerned. It was observed in Five schools visited that most of the Early Childhood educators seem not to have enough knowledge, full control over play activities and using play as a teaching technique. Common among them was, young children are most often allowed to go out for a free play with little or no guidance or supervision. There are debates in the literature (Graue, 2009; Ashiabi, 2007) that one factor that accounts for the limited use of play in the kindergarten was the kind of perception teachers held regarding play as a teaching technique. There are some early childhood educators who believe that play as a teaching technique was not effective while others think otherwise (Eberle, 2011). It was, therefore, necessary to assess the perception of kindergarten teachers in Afadjato South District on the use of play as a teaching technique.

The purpose of this study was to investigate the perception of Early Childhood Educators on the use of play as a teaching technique in the Afadjato South District.

Specifically, this study sought to:

1. Assess the perception of early childhood education teachers on the use of play as a teaching technique in Afadjato South District.
2. Find out the extent to which early childhood education teachers of Afadjato South District engaged the use of play as a teaching technique.

This study was guided by the following research questions:

1. What is the perception of early childhood education teachers in the Afadjato South District on the use of play as a teaching technique?
2. To what extent do early childhood education teachers of Afadjato South District use play as a teaching technique?

The findings from this study would potentially improve the way kindergarten teachers employ play as a teaching technique. Additionally, this research finding would help Early Childhood Educators in the Afadjato South District to uncover their own perceptions about play.

### **Theoretical Framework**

This study adopted the Personal Investment Theory propounded by Maher in 1986. According to Personal Investment Theory, a person's perception towards a particular behaviour determines the way he or she invests his or her time, talent, and energy. This theory contends that the meaning of the activity, for instance, the meaning of play or use of play to a teacher, basically determines his or her Perception towards people, situations, objects,

and actions related to the play. The theory further suggests that a person may have a recognized talent or ability in performing a task but may not be interested in exhibiting the behaviour if the practice is not encouraged by his or her reference group. Thus, when a teacher's play behavior or other related play activities are favoured or appreciated by a social group(s), for instance, school management, other teachers or parents, the teacher is likely to choose to exhibit the behaviour more frequently. Consequently, frequency in behaviour will render to the increased investment of his or her additional time, energy, and skills in the behaviour. In this view, the school management may influence a teacher's use of play as a teaching technique.

### **Materials and Techniques**

Cross-sectional descriptive design was used in the study to enable the study to cover a large section of the target population. This approach seeks to find out how the participants in the context perceive them (Al Kaabi, 2005; Fraenkel & Wallen, 2002). The target population of the study was 230 Early Childhood Educators in the Afadjato South District of the Volta Region. This comprised 20 basic school heads, 20 school supervisors and 190 kindergarten teachers in the Afadjato South District. The accessible population was 180 Kindergarten 1 and 2 teachers; 20 heads and 20 supervisors. The target population for the study was 230 comprising 20 basic school heads, 20 school supervisors and 190 teachers teaching in the kindergartens in the Afadjato South District (Afadjato South District Education Directorate Report, 2018).

A sample of 120 participants was selected for the study. Thus, 100 kindergarten teachers, 10 basic school heads, and 10 school supervisors were selected for the study. Purposive, simple random, and convenience sampling techniques were used to select these participants. Purposive sampling technique helped to select information-rich participants. Simple random sampling was used to select school supervisors and kindergarten 1 and 2 teachers. Numbers "1" and "2" were written on pieces of papers, folded and placed in a basket. Thus, school supervisors and kindergarten 1 and 2 teachers were asked to select one of these papers, and those who selected "1" were made to respond to the questionnaire. Moreover, convenience sampling technique was used to select ten 10 heads out of the 20 heads for the interview. In this technique, heads were asked for their consent to be interviewed, and those who accepted were selected. In all, 110 questionnaires (100 for teachers and 10 for school supervisors) were administered while 10 interviews for school heads were conducted.

Self-developed questionnaires and interview guide were used to collect data. The questionnaire comprised two sections: Section 'A' and 'B.' Section 'A' focused on background information (such as the gender, age, years in the current school, teaching experience and so on). Section 'B' comprised 5-points Likert scale items which were weighed as: Strongly Agree (SA)=5, Agree (A)=4, Undecided (UD)=3, Disagree (D)=2, and Strongly Disagree (SD)=1. However, negative statements on the questionnaire used the reverse scoring. Statements 1-5 were used to answer research question 1, and statements 6-10 were used to gathered data to answer research question 2. Also, the interview guide (semi-structured) was used to gather data. The interview guide had two sections: Section 'A' and 'B.' Section 'A' focused on demographic information of respondents (such as the gender, age, working experience and so on). Section 'B' focused on questions that helped to gather data so as to address the research questions. This was to help the researcher obtain deeper insights about the research problem. The semi-structured interview allowed flexibility in asking follow-up questions. It also offered an opportunity for the researcher to seek clarification through probing and expand the responses of the interviewees to ascertain their perception about using play as a teaching technique in kindergartens. The interview guide was also selected because it allowed the researcher to enter a pupil's viewpoint, to better understand their perspectives (Lichtman, 2010).

Face validity of the instrument was established by giving the prepared instrument to the experts in the field. Content validity of the instruments was ensured by experts in physical and early childhood education departments, and their comments were incorporated. For reliability check, the questionnaire was pilot tested on 50 kindergarten teachers, 5 heads and 5 school supervisors outside the setting of the main study and Cronbach's alpha reliability co-efficient was calculated, and 0.87 was obtained and rendered the questionnaire reliable as stipulated by (Amin, 2005).

Entry protocol was done when permission was sought from the District Director of Education, Afadjato South District, head-teachers, school supervisors and teachers. One Hundred and Twenty-four questionnaires were given to the kindergarten teachers and 10 to the head-teachers. Explanations of the questionnaires were given to kindergarten teachers and head-teachers and 60 minutes was given to them to respond to the items on the questionnaires. Questionnaires were retrieved on the same day, which resulted in about 85 percent return rate.

Descriptive and inferential statistics, specifically frequency counts, percentages, and multiple linear regression were used to analyse the quantitative data involving research questions 1 and 2. Frequency counts and percentages were used to analyse research questions 1. Also, multiple linear regression was used to analyse research question 2. This was because research question 2 sought to find out the extent to which the independent variable (early childhood educators) influences the dependent variable (play as a technique of teaching). Statistical Product and Service Solution (SPSS- version 2.1) were employed to aid in the analysis of the quantitative data.

For ethical reasons, headteachers interviewed were coded headteacher one to ten (HT: 1 to HT:10). This helped to promote confidentiality in this study, interviews were audio-taped after permission was first sought from participants. Besides, all references were duly acknowledged to avoid plagiarism.

## Results/Discussions

### Section A: Background Information of Participants

Statements 1-4 on the questionnaires were used to gather data on the background information of kindergarten teachers, heads of schools, and school supervisors. Table 1, 2, and 3 respectively present the results after the analysis.

Table 1: Background Information of Teachers (N=100)

Variables		Frequency	Percentage (%)
Gender	Male	25	25
	Female	75	75
Age (in years)	25 and below	10	10
	26-30	32	32
	31-35	28	28
	36-40	16	16
	41 and above	14	14
Teaching Experience	1-10	30	30
	11-20	25	25
	21-30	24	24
	31-40	15	15
	41 and above	6	6
Years in Current school	1-10	48	48
	11-20	32	32
	21-30	15	15
	31-40	5	5
	41 and above	-	-

Source: Field data, 2018

Results from Table 1 show that the majority 75 (75%) of the kindergarten teachers were females as compared to their male counterparts who were 25(25%). This result implies that male and female kindergarten teachers were disproportionally represented. Likewise, there were more females kindergarten teachers assigned to kindergartens in the Afadjato South District. The results also revealed that majority of the teachers at the

kindergarten were between 26-30 years (32%), followed by 31-35 years (28%), 36-40 years (16%), 41 and above (14%) and 25 and below (10%). These results suggest that kindergarten teachers selected cut across all ages with the majority been in their youthful stage. Implicitly, if these youths are guided on how to effectively use play as a teaching technique in the Afadjato South District, it would help improve upon children's understanding of the concept taught. Likewise, as the results imply that most of the teachers were in their youthful stage, if the conditions and relevant components of teaching at the kindergarten be addressed, then, the youthful exuberance of these teachers could be tapped for the development of the teaching profession.

The results in Table 1 further show that majority (30%) of the teachers had 1-10 years of teaching experience, followed by 11-20 years (25%), 21-30 years (24%), 31-40 years (15%) and 41 and above (6%). These results imply that kindergarten teachers had long and short teaching experiences, respectively. The results from Table 1 also show that majority of them had stayed in their current schools between 1-10 years (48%), as compared to 11-20 years (32%), 21-30 years (15%), and 31-40 years (5). This result could suggest that these teachers have gained some form of experience in their current schools and, therefore, were likely to help gather data to address the research questions.

Table 2: Background Information of Head-teachers (N=10)

Variables		Frequency	Percentage (%)
Gender	Male	4	40
	Female	6	60
Age (in years)	25 and below	-	-
	26-30	2	20
	31-35	3	30
	36-40	4	40
	41 and above	1	10
Teaching Experience	1-10	2	20
	11-20	5	50
	21-30	2	20
	31-40	1	10
	41 and above	-	-
Years in Current school	1-10	4	40
	11-20	5	50
	21-30	1	10
	31-40	-	-
	41 and above	-	-

Source: Field data, 2018

Results from Table 2 show that majority 6(60%) of the heads were females as compared to males 4(40%). The results correspond with the results on the gender of teachers used in this study. The results suggest that male and female head teachers were given almost a fair representation in this study. This results infer that the more female teachers in the Afadjato South District, the higher the likelihood of having more female heads. The results could imply that these female heads were likely to find it difficult to control their male teachers during instructional supervision. The results further show that majority (40%) of the heads were between 36-40 years, followed by 31-35 years (30%), 26-30 years (20%) and 41 and above (10%). The results imply that though the majority of the heads were in their youthful stage, they have been able to climb higher on the educational ladder, and this has implicitly resulted in their headship positions. Consequently, the results could infer that if these heads are given the needed support in their headship, it will help improve teaching and learning in the Afadjato South District.

The results from Table 2 further show that half (50%) of the heads had 11-20 years of teaching experience, followed by 1-10 years (20%), 21-30 years (20%) and 31-40 years (10%). The results also show that half (50%) of them had been in their current schools between 11-20 years as compared to 1-10 years (40%), and 21-30 years

(10%). It is worth nothing that though selection of supervision position (headteacher) in Ghana is based on professional background and rank in Ghana Education Service (GES), which is also determined by the length of service and not necessary the academic qualification, the crop of headteachers in the Afadjato South District could be highly commendable for their working experiences. These results, therefore, advocate that, in the near future, leadership management position would not be a major issue to bother about in the Afadjato South District.

Table 3: Background Information of School Supervisors (N=10)

Variables		Frequency	Percentage (%)
Gender	Male	6	60
	Female	4	40
Age (in years)	25 and below	1	10
	26-30	2	20
	31-35	3	30
	36-40	2	20
	41 and above	2	20
	Working Experience	1-10	4
	11-20	3	30
	21-30	2	20
	31-40	1	10
	41 and above	-	-
Years in Current school	1-10	6	60
	11-20	4	40
	21-30	-	-
	31-40	-	-
	41 and above	-	-

Source: Field data, 2018

Results from Table 3 show that majority 6(60%) of the school supervisors were males as compared to 4(40%) females. The results recommend that both male and female teachers have been given the opportunity to supervise basic public schools in the Afadjato South District. The results further show that majority of the supervisors were between the ages of 31-35 years (30%), as compared to 26-30 years (20%), 36-40 years (20%), 41 and above (20%) and 25 and below (10%). The results also show that majority (40%) of the school supervisors had 1-10 years working experience, followed by 11-20 years (30%), 21-30 years (20%) and 31-40 years (10%). Again, the results from Table 3 show that the majority of the school supervisors had spent 1-10 years in their current schools (60%) as compared to 11-20 years (40%).

#### **Research Question 1: What is the perception of early childhood teachers on the use of play as a teaching technique in Afadjato South District?**

Research question one (1) sought to find out the perception of early childhood teachers on the use of play as a teaching technique in Afadjato South District. Statements 1-5 on the questionnaires for kindergarten teachers were used to address this question. Frequency counts and percentages were used to analyse the quantitative data. The results are presented in Table 4.



Table 4: Perception of Early Childhood Teachers on the use of play as a Teaching Technique (N=100)

Statements	Means	Standard Deviations
Teachers use play as a teaching technique because it helps the children to understand lessons easily	4.42	0.32
Teachers don't use play in teaching because of a lack of teaching and learning materials	3.80	0.28
Some parents see play as a waste of time; hence, teachers don't use it when teaching	3.38	0.76
Using play requires a lot of time and since teachers have less time to teach a lesson they don't use it at all	3.30	0.79
Teachers use to play, and this makes children to involve themselves in the teaching and learning process actively	3.85	0.25

Source: Field data, 2018

Table 4 shows that majority (M=4.42, SD=0.32) of the teachers appear to believe that "teachers used play as a teaching technique because it helps the children to understand lessons easily", followed by "teachers use play, and this makes children to actively involve themselves in the teaching and learning process" (M=3.85, SD=.25), "teachers do not use play in teaching because of lack of teaching and learning materials" (M=3.80, SD=0.28), "using play requires a lot of time and since teachers have less time to teach a lesson they don't use it at all" (M=3.38, SD=0.76), and "some parents see play as a waste of time; hence, teachers don't use it when teaching" (M=3.30, SD=0.79).

The results support the findings of Ashiabi (2005) assertion that play has the values and ability to foster the socio-emotional developmental progress of learners. He claimed to play to be the perfect venue for the development of socio-emotional readiness and overall success in school and life. Play enhanced the children's ability to role-play, reflect before acting, the ability to show empathy, and their emotional understanding and self-regulation. Cooperation, negotiation, problem-solving, group work, and getting along are also stimulated in children's play even without adult intervention. Both student-initiated and teacher-guided play is important to children's development. Ashiabi (2005) stated that early childhood educators have a role in making play a developmental and learning experience for young children. Children who are mentally healthy tend to be happier, show a greater motivation to learn, have a more positive attitude toward school, more eagerly participate in-class activities, and demonstrate higher academic performance than less mentally healthy peers (Kostelnik, Soderman, Whiren, Rupiper, & Gregory, 2015). Play is healthy and, in fact, essential for helping children reach important social, emotional, and cognitive developmental milestones as well as helping them manage stress and become resilient

These results imply that kindergarten teachers appear to believe that for children to have a better understanding of concepts taught, they have to use play as a teaching technique. This result infers that when kindergarten teachers allow children to have a feel of, manipulate, and permitted to freely interact with their peers and learning materials, their understanding will be enhanced. These help learners to own and construct their own knowledge. Further, the results could imply that kindergarten children grasp lessons taught by their teachers when they use more of play as a teaching technique as confirmed by the Personal Investment Theory (Maher, 1986) used in this study. Thus, early childhood teachers in the Afadjato South District would invest their time, talents, and energies when it comes to the use of play teaching technique. From these results, it could be concluded that early childhood teachers in Afadjato South District have positive perceptions on the use of play as a teaching technique. These findings are in consonance with the findings of Bredekamp (1987) and Ng'asike (2004). According to Bredekamp, teachers' support in children play activities is an extremely important developmental practice as it enhances smooth teaching and facilitates children's learning at their own pace. Ng'asike (2004) purports that teachers in pre-primary schools should focus on investing in play as an appropriate and natural opportunity to reinforce and introduce new concepts to children.

These findings are contrary to the findings of some other studies. For example, there are debates in the literature (Graue, 2009; Ashiabi, 2007) that one factor that accounts for the limited use of play in the kindergarten is the kind of perception teachers hold regarding play as a teaching technique. There are some early childhood educators who believe that play as a teaching technique is not effective, however, some think otherwise (Eberle, 2011). However, these findings contradict the findings of other studies. Although teachers seem to acknowledge the role of play in developing skills, they seem unsure of how to utilize play in an instructional manner (Saracho & Spodek, 1998). Despite a plethora of research suggesting positive outcomes associated with opportunities to engage in social play and negative out-comes associated with peer rejection; there is often a hands-off policy during recess and free-play time in school. Teachers tend to underestimate the prevalence of bullying and do not appear to recognize their potential roles as preventing violence and promoting pro-social skill development (Rodkin & Hodges, 2003).

### **Research Question 2: To what extent do early childhood teachers' perception influences their use of play as a teaching technique?**

Research question two (2) sought to find out the extent to which early childhood teachers' perceptions influence their use of play as a teaching technique. Statements 6-10 on the questionnaires for school heads were used to gather data to address this question. Linear multiple regression was used to analyse the quantitative data. The quantitative data results are presented in Tables 5 and 6.

Table 5: Linear Multiple Regression Model Summary on how Early Childhood Teachers' Perception Influences the Use of Play as a Teaching Technique

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted Square</b>	<b>R</b>	<b>Std. Error of the Estimate</b>
1	0.974	0.949	0.945		0.899

Source: Field data, 2018

Linear Multiple Regression test results from Table 5 revealed that 94.9% of the variance in play as a teaching technique was collectively explained by the indicator (early childhood teachers) which was found to be statistically significant [ $F(3, 47) = 289.125, p = .000$ ] at 0.05 alpha level. The results suggest that the model performed well with about 5.1% shrinkage in the variance, which was explained by the population. The results further suggest that, the sample was a good representation of the population. The shrinkage could be as a result of the differences in the characteristics of the sample and the population.

Table 6: Coefficients Result of Linear Multiple Regression

<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>T</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>			
ECEP	-10.323	1.119		-9.225	0.000
UPTM	0.470	0.010	0.975	46.397	0.000

Source: Field data, 2018

( $p > 0.05$ ).

KEY: ECEP=Early Childhood Educators' Perception

UPTM=Use of Play as a Teaching Technique

The results from Table 6 show that early childhood teachers contributed significantly to the use of play as a teaching technique ( $\beta = 0.975, p = 0.000$ ) at 0.05 alpha level. This result suggests that the perceptions kindergarten teachers have could, in a way, influence their use of play as a teaching technique. The results could also imply that if kindergarten teachers have positive perception towards play as a teaching technique, they were

likely to use it more. However, the more kindergarten teachers have a negative perception towards the use of play as a teaching technique, the less they were likely to use it. These results infer that early childhood teachers' perceptions significantly influenced their use of play as a teaching technique.

The results confirm that of Fogle and Mendez (2006) whose correlated data reported in the Parent Play Belief Scale (PPBS) and the Penn Interactive Peer Play Scale (PIPPS). The authors concluded that parents' positive attitudes towards play were related to children's social competence. The researchers found a correlation between the PPBS and children's positive peer play behaviour. Fogle and Mendez (2006) concluded that children whose parents had a greater knowledge of the need for play also had high levels of social competence. Parents' beliefs about play appeared to be worthy of consideration. Some parents may not be aware of the importance of play in building social competence. Parents with high academic focus scores on their PPBS showed a negative correlation to their reported level of educational achievement. This indicated that parents with less education valued academics highly for their children. Both parents and early childhood educators can feel confident that important social skills are learned through play. This study delivered quantitative evidence correlating positive parents' views of play with their children's social competence.

Also, interview guide data from research questions two (2) based on direct quotes and explanations used were analysed. For instance, one school supervisor said:

*In my attempt to go round the school to supervise kindergarten teachers' technique of teaching, I realised that some teachers have a positive perception of play and as a result take the initiative to use play as a teaching technique [SS: 2].*

Another participant said something similar:

*From my experience as a school supervisor for the past ten years, I have realised that the perception teachers have towards play as a teaching technique is the only way that can guarantee their use of it [SS: 8].*

Similarly, a third participant said:

*I strongly believe that when teachers have a positive perception to the use of play, it could encourage them to use it during teaching and learning process [SS: 5].*

These comments connote that the kind of perceptions school supervisors and teachers have towards play could influence its use as a teaching technique. These comments advocate that if kindergarten teachers have positive perceptions towards play, they will use it as a technique of teaching. However, if they have negative perceptions, it could adversely influence its use as a teaching technique.

Interestingly, as it pertains to the extent to which early childhood teachers perceive the use of play as a teaching technique, these findings confirm with the Personal Investment Theory by Maehr (1986). The theory proposes that a person's subjective judgment of his or her ability to perform a task effectively tends to influence the individual's choice to exhibit or inhibit behaviour. When a teacher believes in his or her competence and knowledge in early childhood teaching practices, he or she will increase his or her investment of skills, energy, and talents in use of play as a child-centered teaching and learning approach. The theory suggests that a knowledgeable and skilled person in any area of specialty tends to exhibit a professional behaviour in autonomous and assertive manner regardless of the existence of some impeding factors.

Moreover, developmental theorists such as Piaget and Vygotsky posit that teachers' positive perception towards play as a teaching technique contributes to the cognitive implication of play for development (Schiffman, 2003). While Piaget describes play as practice for the strengthening of skills and existing schema (i.e., assimilation). Contemporary researchers have extended these theoretical considerations to address the role of play in literacy development (Owocki, 1999; Schiffman, 2003), social competence in a variety of settings (Connolly & Doyle, 1984), and assessment of functioning (Casby, 2003). Additionally, when children demonstrate pro-social inclusive behaviours, classrooms become environmentally conducive to overall learning (Wentzel, 1991). Based

on the quantitative and qualitative results, it was concluded that kindergarten teachers' perception positively influenced their use of play as a teaching technique.

### Summary of Findings, Conclusions, and Recommendations

The findings showed that early childhood teachers in Afadjato South District have positive perceptions on the use of play as a teaching technique. The findings indicated that kindergarten teachers' perception positively influenced their use of play as a teaching technique. Based on these findings, the following conclusions have been drawn: To commence with, early childhood teachers in Afadjato South District have good intentions on the use of play as a teaching technique. This suggests that kindergarten teachers in Afadjato South District have positive perception towards the use of play as a teaching technique. Also, kindergarten teachers' could use play as a teaching technique depending on their perception towards play. This result suggests that one way or the other; their perceptions could either positively or negatively influence their use of play as a teaching technique.

Based on the findings and conclusions drawn, the following recommendations are made:

1. Through in-service training, headteachers should encourage early childhood teachers in Afadjato South District to continuously have positive perception towards play as a teaching technique. This could help them to continuously use play as a teaching technique in teaching kindergarten children in Afadjato South District.
2. Personnel in charge of supervision at the Afadjato South District Education Directorate should educate kindergarten teachers on the use to use play as a teaching technique. This could help them use it more often in their lesson delivery; hence, could help children have a better understanding of lessons taught.

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## Piaget's Cognitive Developmental Theory: Critical Review

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### Abstract

In the last century, Jean Piaget proposed one of the most famous theories regarding cognitive development in children. Piaget proposed four cognitive developmental stages for children, including sensorimotor, preoperational, concrete operational, and the formal operational stage. Although Piaget's theories have had a great impact on developmental psychology, his notions have not been fully accepted without critique. Piaget's theory has some shortcomings, including overestimating the ability of adolescence and underestimating infant's capacity. Piaget also neglected cultural and social interaction factors in the development of children's cognition and thinking ability. Moreover, in terms of the methodological approach, Piaget's theory had some ethical and bias problems as he studied his own children. However, Piaget contributions, particularly in regards to the process of education among children and transferring cognition into psychology, have had a significant effect on the science of child development.

**Keywords:** Cognitive Development, Sensorimotor, Preoperational, Concrete Operational, Formal Operational and Child Development

### Introduction

Swiss psychologist Jean Piaget (1986-1980) spent around five decades determining the cognitive development of children (Passer & Smith, 2009). During his studies, he attempted to obtain the answer to some key questions such as: "Why does a child talk, and who is she talking to?" and "Why does she ask so many questions?" "Why children in the same age commit the same error?" (Passer & Smith, 2009; Butler-Bowdon, 2007).

To understand cognitive development, Piaget applied structured observation (Shaughnessy, Zechmeister, & Zechmeister, 2012). During the observations, he wrote down everything about the participant's actions (Butler-Bowdon, 2007). After many years of hard work, he finally publicised his ideas and proposed four global cognitive developmental stages for children, including sensorimotor, preoperational, concrete operational, and the formal operational stage (Bernstein, Clarke-stewart, & Roy, 2008; Martin, Carlson, & Buskist, 2010). Although Piaget's contributions have had a great influence to progress developmental psychology (Oates & Grayson, 2004), his works have not fully accepted due to several methodological issues (Lourenço & Machado, 1996). The aim of the current paper is to demonstrate the key aspects of Piaget's cognitive development theory and evaluate Piaget's idea based on later studies.

## Cognitive development stages

Piaget suggested that all children journey through the sensorimotor, preoperational, concrete operations, and formal operations stages of development (Moreno, 2010). During the process of moving through one stage to the next, children's cognitive ability change qualitatively (Sigelman & Rider, 2012). Piaget also believed that cognitive development is a continuous process and all children, even in different environmental context and culture diversity around the world, have the same sequence of cognitive development (Hockenbury & Hockenbury, 2011).

The first stage of cognitive development is the *sensorimotor stage*, which starts from birth until two years old (Kasschau, 2003). Infants at this age seek to understand objects by using sensor activity (Moreno, 2010). This stage, characterized by object permanence and deferred imitation (Bremner, 2010).

*Object permanence* means that "objects remain in the environment even when they cannot be seen or perceived by other senses" (Moreno, 2010). In Piaget's theory, infants in the first 8 months have a lack of object permanence; which means that they cannot understand hidden objects (Hockenbury & et al., 2011). As infants deal with objects physically in this period (Cacioppo & Freberg, 2013), if they do not see them, they believe these objects do not exist (Martin, Carlson, & Buskist, 2010; Hockenbury et al., 2011).

Based on Piaget's theory during the sensorimotor stage, three essential developments occur. Firstly, by 18 months, children can express limited vocabulary, and by two years, they can express short and meaningful sentences (Cacioppo et al., 2013). Secondly, children at the end of the sensorimotor stage develop their capacity to imitate others, which Piaget called "deferred imitation" (Martin et al., 2010). *Deferred imitation* is "the ability to reproduce a modeled activity that has been witnessed at some point in the past" (Shaffer & Kipp, 2010). Finally, by the end of this stage, children imagine and represent symbols relatively (Martin et al., 2010).

## New views of the infant's cognitive capabilities

Studies have demonstrated that many cognitive capabilities among infants emerge earlier than in Piaget's theory (Bauer, Larkina, & Deocampo, 2011). Infants have innate knowledge about the external world, and their learning ability is faster than Piaget believed (Spelke & Newport, 1998).

With respects of object permanence, Baillargeon (1987) pointed out that infants in their early age search to find objects earlier than Piaget proposed. And infants under the first age have cognitive ability to understand that hidden objects are not out of sight (Baillargeon, 1995; Hespos & Baillargeon, 2001; Shinskey & Munakata, 2005; Baillargeon, Li, Gertner, & Wu, 2011).

According to Piaget, deferred imitation appears among children between 18 to 24 months (Piaget, 1962). However, Meltzoff (1995) indicates that infants have the ability to imitate different types of action earlier than Piaget suggested (Meltzoff, 1995). Recently, studies found that even infants at six weeks could imitate other's facial expression (Berk, 2006; Lamb, Bornstein, & Teti, 2002). In addition, 6 month-old infants after one day delay (Barr, Dowden, & Hayne, 1996; Collie & Hayne, 1999), 9 months-old infants after a 1-day delay (Meltzoff, 1988) and 14 months-old infants after 7 days delay showed referred imitation (Meltzoff, 1988).

Developmental psychologists (e.g., Meltzoff, 1988; Wynn, 1992; Meltzoff, 1995) demonstrated that an infant's mental representations develop earlier than Piaget recommended. Physical reasoning is an innate ability that assists infants to think about physical objects and interact with them (Baillargeon et al., 2012).

The second stage of cognitive development in Piaget's theory is the *preoperational stage*. This stage starts from 2 years to 7 years old (Cacioppo et al., 2013). During this stage, an infant's symbolic ability develops such as using images and words as symbols to understand the physical world (Bjorklund & Blasi, 2012). Children

between 2 and 4 years old can draw a picture (Santrock, 2011). However, they do not have the ability to think logically (Ciccarelli et al., 2012).

According to Piaget, the first limitation of the preoperational stage is *animism* (Santrock, 2011). Animism is the ability to distinguish between animate and inanimate objects (Shaffer et al., 2010). Children in this stage believe that everything around them is alive (Bernstein et al., 2008). For example, Santa Claus is not a real person, but because children usually see him on TV and pictures; they believe that he is alive (Ciccarelli et al., 2012). Even children in this stage believe that inanimate object is alive, and they say "that tree pushed the leaf off, and it fell down" (Santrock, 2011).

However, Bakscheider, Shatz, & Gelman (1993) carried out an experimental study which gave contrasting findings to Piaget's notion about animism. They pointed out that a preoperational child can distinguish between inanimate and animate objects. For example, they asked three and four-year-old children how the healing process happens after injuring plants, animals, and artifacts (Bakscheider et al., 1993). The result of their study demonstrated that children at four years old understood that artifacts are fixed by individuals and others will be cured by means of regrowth (Bakscheider et al., 1993).

According to Piaget's theory, another limitation of the preoperational stage is *egocentrism* (Santrock, 2011). Egocentrism refers to the child's inability to differentiate between their perspective and others (Kesselring & Müller, 2011). For example, when children stand in front of the TV, they believe that others behind him/her still can see the TV screen. Piaget believed that children are highly egocentric until a later age (Comer et al., 2011). Although few studies supported Piaget's idea that a young child is egocentric, most experiments have shown that child can take others perspective earlier than Piaget suggested (Comer et al., 2011).

Therefore, Piaget's thought of egocentrism has been revised critically (Newcombe & Huttenlocher, 1992). In a very early study, Liben (1978) pointed out that only three years old children are egocentric. Newcombe et al., (1992) supported Liben's idea, and they showed that 4 years old could take other's perspective, and their mental states differ from others (Doherty, 2008). Also, it was found that even 2 years old can distinguish between their peers and adults, which when they speak with adults, use longer sentences (Martin et al., 2010). It means that preschool children are not as egocentric as Piaget thought (Flavell, 1999).

In Piaget's idea, children during the preoperational stage have conservational difficulty (Kesselring et al., 2011). **Conservation** refers to the ability to recognize that something remains the same amount even if its shape change (Franzoi, 2011). Children who do not have conservation ability have a limited mental capacity to understand the change of shapes (Franzoi, 2011).

In contrast, studies have shown that preoperational children have the ability of conservation (Gelman, 1972; Gelman & Baillargeon, 1983)). Preschool children are able to do conservation tasks if the tasks are appropriate to their level of thinking and understanding (Berk, 2006). After manipulating the complexity of conservational tasks, researchers reported that Piaget was not correct (Bidell & Fischer, 1992). For example, in his experimental study, Gelman (1972) manipulated the complexity of tasks to judge conservational ability among young children. Finally, he found that even 3 years old children can perform conservation tasks successfully (Gelman, 1972). The difficulty to perform the conservational tasks correctly related to displaying complex tasks by Piaget and preschool children more capable than Piaget theorized (Gelman, 1972).

According to Piaget, the third stage of cognitive development among children is the *concrete operational stage*. It is between the age of 7 years until 11 years old (Franzoi, 2011). Piaget suggested that children during this period are less egocentric; they display the ability to understand concert things (Hockenbury et al., 2011); and they can solve complex problems (Bjorklund, 2012).

In this stage, children's conservation principles develop which they can understand such things as half a liter of water has the same amount in a taller or wider glass (Shaffer et al., 2010). Furthermore, at around 8 years, old children start to solve problems (Lightfoot, Cole, & Cole, 2009).



Moreover, *classification* is another significant characteristic of the concrete operational stage. Piaget suggested that children during this stage can classify objects into different types such as shape, value, and size; children can also consider their associations (King, 2011). When children play with objects, they can understand the difference between strong objects which are fit to play with and weaker object that is not fit to play with (King, 2011). In addition, based on Piaget's notion, children in the concrete operational stage also have the ability to understand the relationship between sets and subsets (Santrock, 2011). For example, children in this stage can understand that one person can be a father, grandfather, and brother at the same time (Santrock, 2011).

In contrast to Piaget notion, children in the concrete operational stage often overestimated (Cacioppo et al., 2013). Recent researchers found that children in this stage cannot understand the relationship between those things that do not exist in the physical world, such as the relationship among numbers as Piaget suggested (Comer et al., 2011).

The final cognitive stage among children is the *formal operational stage*. Piaget proposed that when children approach 11 years, they achieve the final stage of cognitive development (Franzoi, 2011). Piaget believed that during this stage, an individual's thinking and understanding develop significantly (Feldman, 2013). Piaget believed that adolescents in this stage could think logically and deal with abstracts such as math (Pastorino & Doyle-Portillo, 2013).

### **Does every child reach the formal operational stage?**

Although Piaget proposed that all children, without exception, go through the four different types of cognitive development (Bernstein et al., 2008), recent literature demonstrated that not all adolescents approach the formal operational stage (Martin et al., 2010). Since in some societies, the educational process does not focus on critical thinking, which is very essential to reach a formal operational stage (Cole, 1990). Studies showed that only half of the individuals in some societies reach the formal operational stage due to the lack of educational background (Bernstein et al., 2008). Moreover, sometimes individuals can illustrate formal operational skill in just one field, for example, an individual who is a very good an engineer, can think logically about this particular area, but at the same time are very likely to have difficulty thinking logically about poetry (Martin et al., 2010).

It has been found that the ability of formal operational thinking among humans has changed over time (Shaffer et al., 2010). Formal operational competence has been examined among French individuals in the different period between 1967 to 1996 (Shaffer et al., 2010). The result demonstrated that individuals in the current era in terms of thinking logically and solving problems are more capable than individuals who lived three decades ago (Shaffer et al., 2010). Biological psychologists also proposed that adolescents, until the age of 20 years, cannot deal with complex calculation properly due to the limitation of their brain activity (Cacioppo et al., 2013).

### **Piaget and culture diversity**

Some believe that Piaget ignored cultural, educational, and social influence on children's cognitive development. In order to reveal cognitive development stages among children, Piaget did not examine children from diverse societal backgrounds; he examined only children in a western society who had formal education compared with non-western society (Lilienfeld, Lynn, Namy, & Woolf, 2011).

Similarly, the most important aspect of Piaget's theory is the detection of cognitive stages among children was interaction and deal with physical objects (King, 2011). Life pattern and cultural context have been found to play a significant role in cognitive development, however, Piaget ignored this particular area (Franzoi, 2011). For instance, individuals in the nomadic tribe who do not stay in a particular location cannot deal with numbers properly, and they have more difficulty than children in westernized societies in terms of counting objects and conservation principles (Franzoi, 2011). Therefore, cultural influence has been considered an important aspect of cognitive development (Martin et al., 2010). It was found that individuals in Hausa tribe in Nigeria between age 5 to 11 years old failed to understand numbers as conservation tasks because they were not familiar with education and schooling (Martin et al., 2010). Therefore, emerging cognitive stages differ among societies; it's

possible in one society for children to achieve the formal operational stage and in other societies, children remain in the concrete operational stage (Byrnes, 1988).

Moreover, Piaget also underestimated the effects of interaction influence among peers on cognitive development. Piaget did not consider that children living with their families are influenced by their families (Cacioppo et al., 2013). Also, children communicate with their peers outside of the home; this communication can lead to developing a child's thinking to understand the external world (Kail, 2012). In addition, every society has particular activities which have a profound effect on an individual's cognitive development (Rogoff, 1995).

Others believe that Piaget paid too little attention to the impact of social factors on the cognitive process, however, he did not ignore social influence entirely (Kail, 2012). Piaget explored some aspects of the role of interaction on children, proposing that communication with others transforms a child's egocentric thinking to "socialized thinking" (Lourenço & et al., 1996). Piaget also acknowledged that cultural context and social interaction affect cognitive development (Shaffer et al., 2010). However, he did not theorize on how social context affects cognitive development (Shaffer et al., 2010). Psychologists now understand children's thinking and understanding by means of their cultural context (Shaffer et al., 2010). Kitchener (1991) believes that Piaget was not familiar with sociology as a science, therefore, Piaget's sociological thought was limited (Kitchener, 1991).

The Russian psychologist Lev Vygotsky theorized that interaction with others has a great influence on cognitive development (Hockenbury et al., 2011). He argued that children have the capacity to accomplish larger amounts of cognitive improvement through social interaction, Piaget failed to acknowledge this influence (King, 2011). Piaget established his cognitive development theory based on children's dealing with physical objects, however, Vygotsky believed that a child's mind develops when they interact with other people's minds (Bernstein et al., 2008). During this interaction, children use language to ask questions, and others respond to them, this process contributes to the development in the cognitive ability of children (Cacioppo et al., 2013).

### **Piaget and Methodological issue**

In terms of the principles of developmental science, Piaget's theory has some problems. Firstly, regarding the selection of participants; Piaget did not select a great variety of participants to provide a reliable result, mostly he only examined his own children (Lilienfeld et al., 2011). Furthermore, one of the most important aspects in research methodology is to reduce the effect of sampling bias by selecting participants very carefully. Hence, it is not possible to generalize his ideas to children from different cultures or countries around the world.

Secondly, Piaget often utilized the clinical method to collect data. This method is more flexible, so participants are likely to ask different questions (Miller, 2011). However, uniform materials, questions, directions, and techniques to evaluate psychological variables are the spine of experimental psychology (Miller, 2011).

Modern psychologists have been frustrated by Piaget's reports of his experiment. Piaget did not explain the social-economic background of the children, the number of participants, the participant's race or ethnicity, and he did not provide ample detail about his testing measures (Miller, 2011). It is difficult to identify whether Piaget is describing children hypothetically or if he indeed really tested them (Lilienfeld et al., 2011). Moreover, Piaget was poor in the analysis of statistics which he says, "Psychologists over-generalized their methods and arrived at delightful trivialities, particularly when an army of scientists translated their results into mathematical terms" (1918, p. 63 cited in Miller, 2011, 85-86). In addition, "acute observation, especially when made by [a good observer] . . . , surpasses all statistics" (1936/1952, p. 72, cited in Miller, 2012, 85-86). This means statistical summaries were not given by Piaget about his discoveries, and he supplied lengthy specimen protocols interpreted by Piaget of which readers often do not understand the themes of (Miller, 2012).

### **Conclusion**

Swiss psychologist Jean Piaget spent his career determining the cognitive ability among children in their early life until a later age (Krause & Corts, 2012). He proposed four cognitive stages, which he believed every child

goes through consecutively, without skipping a phase (Bernstein et al., 2008). Although Piaget's theory has had a great influence on the child and developmental psychology (Oates et al., 2004), nativism had a different viewpoint in some respects. In terms of the first stage of cognitive development (sensorimotor stage), nativism believed that children are born with some innate knowledge, and they have more capability than Piaget suggested (Baillargeon, 1987). Gelman (1977) believed that Piaget used complex tasks and inadequate strategies to evaluate conservation among children. For example, in one study, Gelman (1972) manipulated the tasks to assess conservational ability among children, and he found a different result which did not support Piaget's result.

Some new developmental psychologists believe that Piaget underestimated an infant's ability in both the sensorimotor and preoperational stage. They also argue that Piaget overestimated formal operational children (Cacioppo et al., 2013). For example, children can do object permanence, understand the conservation, and imitate others earlier than Piaget proposed (Baillargeon, 1987; Gelman, 1972; Meltzoff, 1995).

Social factors have had a significant role in cognitive development among children. Children live with their own parents, and they interact with their peers and teachers; all of these have a great deal of influence on a child's level of thinking and understanding (Cacioppo et al., 2013). Russian psychologist, Lev Vygotsky proposed that children's minds develop in a sociocultural context rather than interactions with a physical object which Piaget suggested (Schacter, Gilbert, & Wegner, 2011). Thus, it is suggested for psychological researchers to account for social factors and cultural contexts in cognitive development studies (Bidell & Fischer, 1992). Vygotsky noticed that cultural tools, such as counting systems and language, have a very strong impact on cognitive development (Bernstein et al., 2008).

Despite all criticisms, Lourenço et al., (1996) claimed that researchers who criticized Piaget had not understood Piaget's major role and contributions. Therefore, Piaget's works have been misinterpreted and criticized in the wrong way, and Piaget had a great deal influence on developmental psychology (Lourenço et al., 1996). Beilin (1992) proclaimed that the influence of Piaget's work on developmental psychology is like that of Shakespeare's influence on English literature (Beilin, 1992). Today, the impact of Piaget's theory has guided psychologists in order to reconceptualize the concept of cognitive development (Lilienfeld et al., 2011). In addition, further researchers have been guided to some important questions which Piaget posed in order to investigate new findings in the area of cognitive development (Shaffer et al., 2010).

Flavell as a famous expert in the field of child development stats that "many of Piaget's contributions have become so much a part of the way we view cognitive development nowadays that they are virtually invisible" (Flavell, 1996: 202). Gelman et al. (1983) also quoted, "it is always easy to examine the past in terms of the present. What is more difficult is to create the future. It will be hard. Very hard, to do as well as Piaget" (Gelman et al., 1983: 220). However, Neo-Piagetian believes Piaget's theory must be revised based on new studies (Santrock, 2011). Psychologists today can use neuroimaging in order to obtain more specific knowledge of cognitive development and stage transition (Cacioppo et al., 2013).

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# Scientific Publications in Muslim Countries: Opportunities and Challenges for Islamic Universities in Indonesia

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## Abstract

This research has the objective to determine the profiles of scientific publications in Muslim countries, including: the position of Muslim countries developing scientific publications through scientific journals; an overview of scientific journals that develop in Muslim countries; and an overview of scientific journals that develop in Muslims countries as an indicator of opportunities and challenges of scientific publications for Islamic Universities in Indonesia. The research method used was content analysis with the main data source from The Islamic World Science Citation Center (ISC). The data analysis used descriptive statistics with percentage model, and it was described in qualitative descriptive. The results demonstrate that the most widely owned scientific publications are from Malaysia, followed by Iran and Pakistan, which is above 100. The scientific publications, over 40 in number, come from Turkey, Saudi Arabia, and Egypt. The scientific publications, at around 14-24 in number, come from India, Jordan, Indonesia, and Azerbaijan. In addition to the 10 countries mentioned above, 20 other countries have approximately 1-7 scientific publications on average. The lack of scientific publications in Muslim countries becomes a great opportunity and challenge for Islamic Universities in Indonesia for producing quality scientific publications.

**Keywords:** Scientific Publications, Muslim Countries, Islamic Universities

## 1. Introduction

Scientific discoveries in Muslim countries are oftentimes nothing more than historical romance - from Ibnu Sina to other public figures, etc. That's in terms of the figures. From the point of view of large and magnificent libraries, the Muslims still keep thinking over the magnificence of Baitul Hikmah in the past. Similarly, when discussing about the educational institutions, they still imagine about Al Azhar University in Egypt. There have not been any significant changes beyond romantic history. Even if there are contemporary figures, Muslim references are only pointed to Nobel recipients, Dr. Abdussalam from Pakistan and Ahmed Zewail from Egypt, and pretty much nobody else. Meanwhile, the research and search for science have been recommended in the

Qur'anic sentence: *Say: Are the same as those who know and do not know?" Actually, only a reasonable person can receive lessons. (Az-Zumar (39): 9).*

Such spirit is less synchronized with the reality of the Muslims. It is said by Pervez Hoodbhoy (2008), citing the study of International Islamic University, Malaysia, showing the records from Science Citation Index and Social Sciences Citation Index: from the average scientific publications of 47 Organisation of Islamic Cooperation (OIC) countries being surveyed, they have only 13 per one million populations, whilst the world's average for this index is 137. Even worse, out of the 28 countries with the lowest scientific article productivity, half was OIC members. The combined 20 Arab countries only contribute for 0.55 percent of the world's total scientific works, while Israel at 0.89 percent, Germany at 7.1 percent, Britain 7.9 at percent, Japan 8.2 at percent and America at 30.8 percent. It can be one indicator of the lack of optimal educational roles and functions in Muslim countries.

The OIC, originally called Organization of Islamic Conference, was set on the basis of a high-level meeting held in Rabat, Morocco, on 25 September 1967, as a result of the action happening at Al-Aqsa-Jerusalem Mosque. The OIC is the only intergovernmental organization representing the world's Muslims. This organization consists of 57 countries, including Indonesia, which covers three regions of Asia, Arab, and Africa (ICO, 2019). The OIC display a full range of information and data.

Scientific publications in Indonesia, as one of the OIC members, are mostly supported by educational institutions. The university holds 96% of the power of 50 Indonesian scientific institutions on indexed scientific publication profile, *Scopus* (Lukman, Yaniasih, Maryati, Silalahi, & Sihombing, 2016). Based on the national recap of the even semester of 2014/2015, there are 3,124 universities under Higher Education Agency (Public Universities), 968 public and private religious universities under the Ministry of Religious Affairs, and 172 official universities under Higher Education Agency and Ministry of Religion. One attention focus of Islamic Higher Education (PTKI) as a unit of higher education is to have competitiveness at national and international levels. Scientific publication is one of the important elements and a key indicator of academic works conducted by higher education (Kementerian Agama, 2015; Zuhdi, 2018) The quality and quantity of scientific publications by universities can be determined through citation analysis. One of the websites providing the citation data is The Islamic World Science Citation Center (ISC).

Citation analysis is currently one of the most widely used metrics for analyzing the scientific contribution in different fields. The Islamic World Science Citation Center (ISC) aims at promoting technical cooperation among Muslim scientists and their respected centers, based on these theories. It also facilitates the accessibility of knowledge and research contribution among them. Due to its web-based features, ISC products are available worldwide, and due to its functions, ISI and Scopus index journal is interested in further cooperation with ISC. Because of its encompassing nature regarding different languages, ISC products pave the way for achieving a unique database which provides value-added knowledge about the scientific contribution of different Islamic Countries along with the full text all their respected journals in their native language. Because of the evaluation of universities carried out by ISC, more and more organizations are interested in indexing their journals in ISC databases. ISC has provided a robust foundation form projecting scientific journals, scientists, and researchers' views and assessing universities and research centers scientific performance (Mehrad & Arastoopoor, 2012).

The present research explores the opportunities and challenges of scientific publications for Islamic Universities in Indonesia based on the position of Muslim countries developing scientific publications through scientific journals, an illustration of scientific studies in scientific journals that developing Muslim countries.

## 2. Method

This research employed content analysis method with the main data source from ISC data with the web address: <http://www.isc.gov.ir/>. Populations and samples were all Muslim countries included in the membership of the Organization of Islamic Conference (OIC), either those having membership status or observer status in this organization. The data collection tool was a document analysis. The data analysis used descriptive statistics with the percentage model and was described in qualitative descriptive.

### 3. Results

#### 3.1 The Position of Muslim Countries developing Scientific Publications through Scientific Journals

The Organization of Islamic Conference (OIC) has 2 types of membership status, i.e., members and observers. There are 57 member states and 5 observer states. However, of all members, those identified to have ISC are only 30. The percentage is shown in Table 1, and the publication composition of the amount is shown in Table 2.

Table 1. The percentage of scientific publications in Muslim countries

No	Status in OKI	ISC	Percentage
1	Member	57	48,38
2	Observer	5	0
	Total	62	30

Table 2. Number of Scientific Publications in Muslim Countries

No.	Country	Number	Percentage
1	Malaysia	400	37.56
2	Iran	249	23.38
3	Pakistan	108	10.14
4	Turkey	77	7.23
5	Saudi Arabia	56	5.26
6	Egypt	40	3.76
7	India	24	2.25
8	Jordan	20	1.88
<b>9</b>	<b>Indonesia</b>	<b>17</b>	<b>1.60</b>
10	Azerbaijan	14	1.31
11	Oman	7	0.66
12	Bangladesh	6	0.56
13	Lebanon	6	0.56
14	Syria	6	0.56
15	Kuwait	4	0.38
16	Libya	4	0.38
17	Sudan	3	0.28
18	Tunisia	3	0.28
19	United Arab Emirates	3	0.28
20	Algeria	2	0.19
21	Iraq	2	0.19
22	Morocco	2	0.19
23	Nigeria	2	0.19
24	Singapore	2	0.19
25	South Africa	2	0.19
26	Yaman	2	0.19
27	Afghanistan	1	0.09
28	Palestinian Authority	1	0.09
29	Russia	1	0.09
30	Sri Lanka	1	0.09
Total		1,065	100.00

#### 3.2 An Overview of Scientific Studies in Scientific Journals that Develop in Muslim Countries

The classification of the sciences published in Muslim-populated countries is shown in Table 3. Figure 1 is a histogram of classification of sciences in scientific publications in OIC member states

Table 3. Scientific Fields being Assessed in Scientific Journals in the OIC Member States

No	Field	Number	Percentage
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1	Humanities	386	36.24
2	Basic Sciences	268	25.16
3	Medical Sciences	173	16.24
4	Engineering	146	13.71
5	Agricultural Sciences	54	5.07
6	Veterinary Sciences	26	2.44
7	Art	12	1.13
Total		1,065	100.00

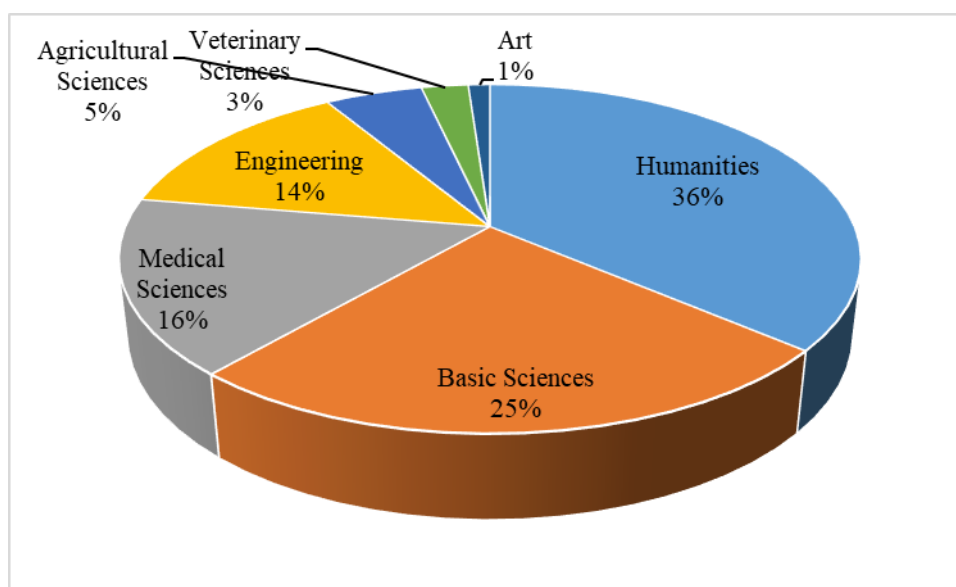


Figure1. Histogram of classification of sciences in scientific publications in OIC member states

### 3.3 An Overview of specifications of scientific journals that develop in Muslim countries

There are 7 specifications of scientific journals developed in the OIC Member States, as listed in Table 7. The overview of each field of scientific publication is presented in Tables 4-11. The agricultural science studies being published in Muslim countries are presented in Table 4. Figure 2. is a histogram of Scientific Publication in Agricultural Science.

Table 4. Number of Scientific Publications in Agricultural Science

No	Country	Number	Percentage
1	Malaysia	15	27.78
2	Pakistan	10	18.52
3	Iran	9	16.67
4	India	4	7.41
5	Turkey	4	7.41
6	Saudi Arabia	3	5.56
<b>7</b>	<b>Indonesia</b>	<b>2</b>	<b>3.70</b>
8	Jordan	2	3.70
9	Azerbaijan	1	1.85
10	Bangladesh	1	1.85
11	Syria	1	1.85
12	Oman	1	1.85
13	UAE	1	1.85
Total		54	100.00

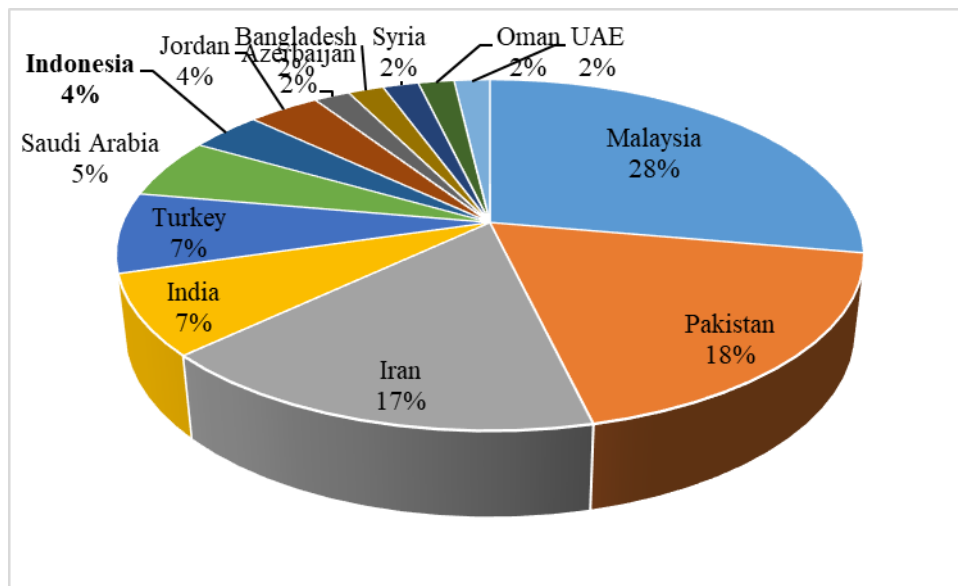


Figure 2. Histogram of Scientific Publication in Agricultural Science

The Art studies published in scientific papers in Muslim countries can be described in Table 5. Figure 3. is a histogram of scientific publications in art studies.

Table 5. Number of Scientific Publication in Art Studies

No	Country	Number	Percentage
1	Pakistan	3	25,00
2	Saudi Arabia	3	25,00
3	Malaysia	2	16,67
4	Egypt	1	8,33
5	Iran	1	8,33
6	Turkey	1	8,33
7	Jordan	1	8,33
Total		12	100,00

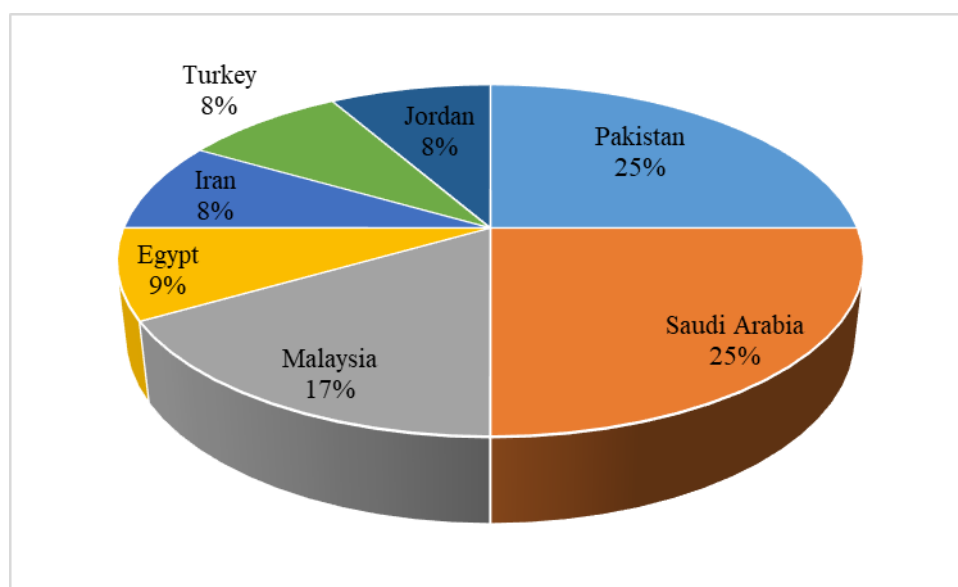


Figure 3. Histogram of scientific publications in art studies

The Scientific Publications in the field of Basic Sciences in Muslim countries are presented in Table 6 and figure 4 below.

Table 6. Number of Scientific Publications in Basic Science

No	Country	Number	Percentage
1	Malaysia	126	47,01
2	Iran	49	18,28
3	Pakistan	27	10,07
4	Turkey	13	4,85
5	Saudi Arabia	12	4,48
6	Egypt	10	3,73
7	Malaysia	5	1,87
8	Azerbaijan	4	1,49
<b>9</b>	<b>Indonesia</b>	<b>3</b>	<b>1,12</b>
10	India	3	1,12
11	Lebanon	2	0,75
12	Libya	2	0,75
13	Oman	2	0,75
14	Sudan	2	0,75
15	Tunisia	1	0,37
16	Algeria	1	0,37
17	Bangladesh	1	0,37
18	Iraq	1	0,37
19	Jordan	1	0,37
20	Nigeria	1	0,37
21	Singapore	1	0,37
22	Syria	1	0,37
Total		268	100,00

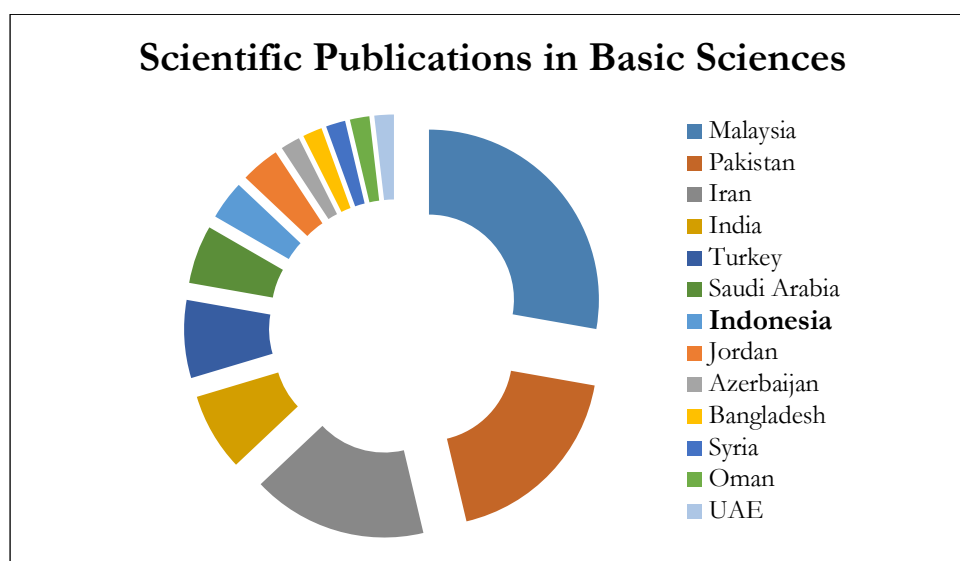


Figure 4. Histogram of Scientific Publications in Basic Sciences

Scientific Publications in the field of Engineering/ Engineering Studies in the OIC Member States are presented in Table 7 and Figure 5.

Table 7. Number of scientific publications in engineering studies

No	Country	Number	Percentage
1	Malaysia	56	38,36
2	Iran	46	31,51
3	Pakistan	10	6,85
4	Turkey	7	4,79
5	Egypt	6	4,11
6	India	5	3,42
7	Saudi Arabia	4	2,74
8	Azerbaijan	3	2,05

9	United Arab Emirates	2	1,37
10	Indonesia	1	0,68
11	Jordan	1	0,68
12	Oman	1	0,68
13	Russia	1	0,68
14	Singapore	1	0,68
15	Syria	1	0,68
16	Tunisia	1	0,68
Total		146	100,00

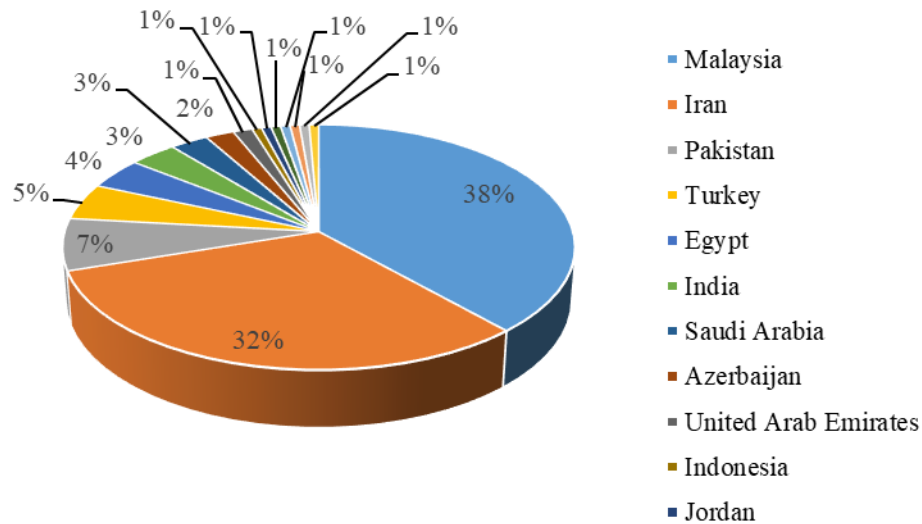


Figure 5. Histogram of scientific publications in engineering studies

Scientific Publications in the field of Humanities Studies in OIC member states are presented in Table 8 and Figure 6 below.

Table 8. Number of Scientific Publications in Humanities Studies

No	Country	Number	Percentage
1	Malaysia	157	40,67
2	Iran	65	16,84
3	Pakistan	43	11,14
4	Turkey	28	7,25
5	Saudi Arabia	19	4,92
6	Egypt	15	3,89
7	Jordan	12	3,11
8	India	10	2,59
9	Indonesia	10	2,59
10	Azerbaijan	4	1,04
11	Lebanon	4	1,04
12	Kuwait	3	0,78
13	Syria	3	0,78
14	Bangladesh	2	0,52
15	Afghanistan	1	0,26
16	Algeria	1	0,26
17	Iraq	1	0,26
18	Libya	1	0,26
19	Morocco	1	0,26
20	Nigeria	1	0,26
21	Oman	1	0,26
22	Palestinian Authority	1	0,26
23	Sir Lanka	1	0,26

24	Sudan	1	0,26
25	Tunisia	1	0,26
Total		386	100,00

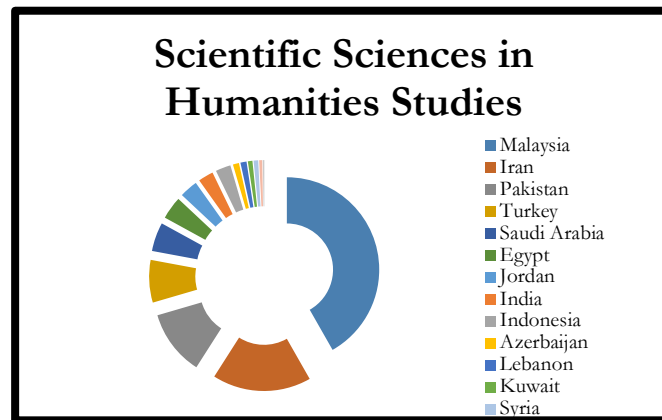


Figure 6. Histogram of Scientific Sciences in Humanities Studies

Scientific Publications in Medical Sciences Studies in OIC Member States are presented in Table 9 and figure 7.

Table 9. Number of Scientific Publications in Medical Sciences

No	Country	Number	Percentage
1	Iran	68	39,31
2	Malaysia	21	12,14
3	Turkey	19	10,98
4	Malaysia	12	6,94
5	Saudi Arabia	9	5,20
6	Pakistan	6	3,47
7	Saudi Arabia	6	3,47
8	Egypt	6	3,47
9	Pakistan	6	3,47
10	Turkey	4	2,31
11	Azerbaijan	2	1,16
12	India	2	1,16
13	South Africa	2	1,16
14	Yaman	2	1,16
15	Egypt	1	0,58
16	Oman	1	0,58
17	Bangladesh	1	0,58
18	Indonesia	1	0,58
19	Jordan	1	0,58
20	Kuwait	1	0,58
21	Libya	1	0,58
22	Morocco	1	0,58
Total		173	100,00

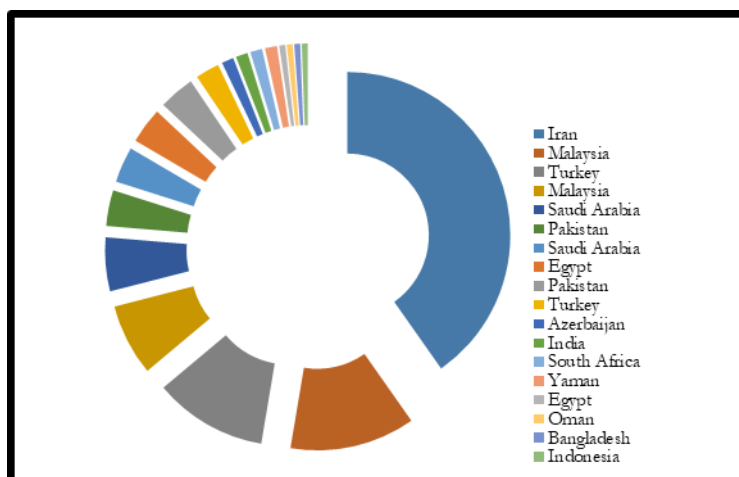


Figure7. Histogram of Scientific Publication in Medical Sciences

Scientific Publications in the field of Veterinary Sciences in the OIC Member States are presented in Table 10 and Figure 4 below.

Table 10. Number of Scientific Publications in Veterinary Sciences

Country	Number	Percentage
Iran	11	42,31
Malaysia	6	23,08
Pakistan	3	11,54
Jordan	2	7,69
Bangladesh	1	3,85
Egypt	1	3,85
Oman	1	3,85
Turkey	1	3,85
Total	26	100,00

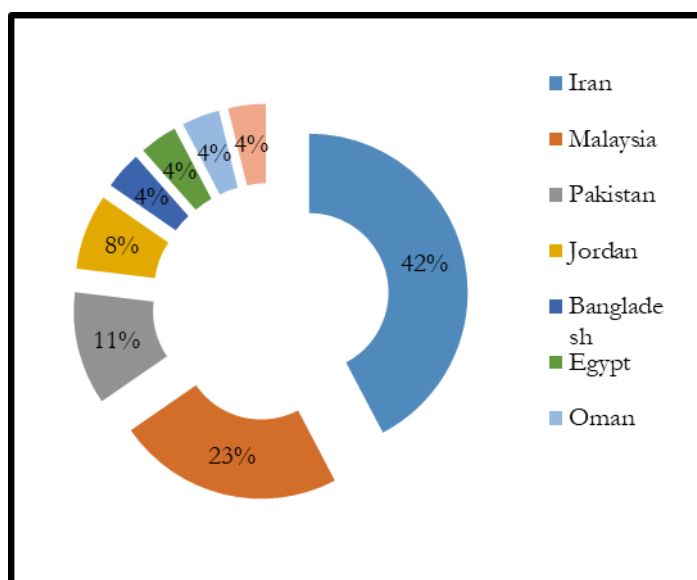


Figure 8. Scientific Publications in Veterinary Science

#### 4. Discussion

The results suggest that Indonesia, as one member state of OIC, has had scientific publications on ISC. However, the scientific publications owned by Indonesia remain very little in number in comparison with the other countries. Indonesia ranked 9<sup>th</sup> in the number of scientific publications, as many as 19; while Malaysia ranked 1<sup>st</sup>

with 400 scientific publications. As presented in Table 2, most of the scientific publications in OIC member states are still weak.

The causes of weak scientific publications include the use of foreign languages in scientific publications. According to the president of ISC: “*language context analysis of indexed publications shows just 30 % of publications are in English. The other portions belong to 30% in Arabic, 29% in Persian, 6 % in Turkish, 3% in Urdu, 1% in Malaysian, and 1% in French*”. The context analysis of indexed publications shows that only 30% of the publications are in English. The other portions belong to 30% in Arabic, 29% in Persian, 6 % in Turkish, 3% in Urdu, 1% in Malaysian and 1% in French (Islamic World Science, 2012).

Another cause is the low income per capita of the population in most Muslim countries. The results of research by Habibi & Mirhosseini (2010) show that: *The publications of Islamic countries increased from 6906 in 2002 to 21656 in 2009. There was a positive correlation between GDP per capita and publication per million. However, publication productivity did not decrease significantly with the increase of PBP. Turkey and Iran were top two among Islamic countries in terms of the number of publications and growth of the rate of scientific publication, respectively. Islamic countries do lag behind developed countries in terms of the number of publication and the rate of growth.*

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The research by Maryam Khoub nasab jafari, Eliza Sadeghifar, Majid Khalili, Khalil Ansarin, Abolghasem Jouyban (2012): *The analyses of data revealed that Turkey is the leading country followed by Iran, Egypt, Malaysia and Nigeria when total numbers of indexed articles in ScopusTM are considered.*

Such finding confirms the OECD histogram (2010) in Figure 9 below.

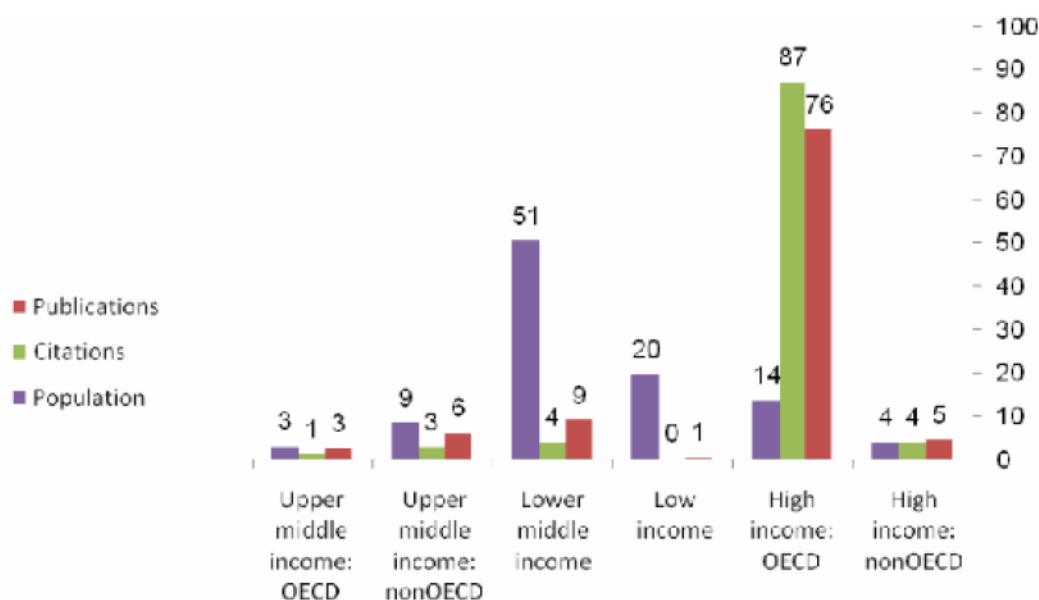


Figure 9. Share of world populations, publications & citation by economic classification.

Figure 9 indicates that the higher income of a country will contribute to its scientific publications and citation of scientific publications. In addition, the lower population of a country is also related to its scientific publications and citation of scientific publications. Thereby, it appears that the population and income of a country are related to its scientific publications and citations of scientific publications.

In the context of Muslim countries, many Muslim countries have low income and large populations; and with such indications, it means that many Muslim countries have low production and publication of scientific papers, and are weak in the citation of scientific publications. If such condition is being associated with the theory of needs, then it will bear some truth - as in the opinion of Maslow, there are 8 types of needs, arranged in a hierarchical and gradual order. The requirement can be seen in the Figure 10.

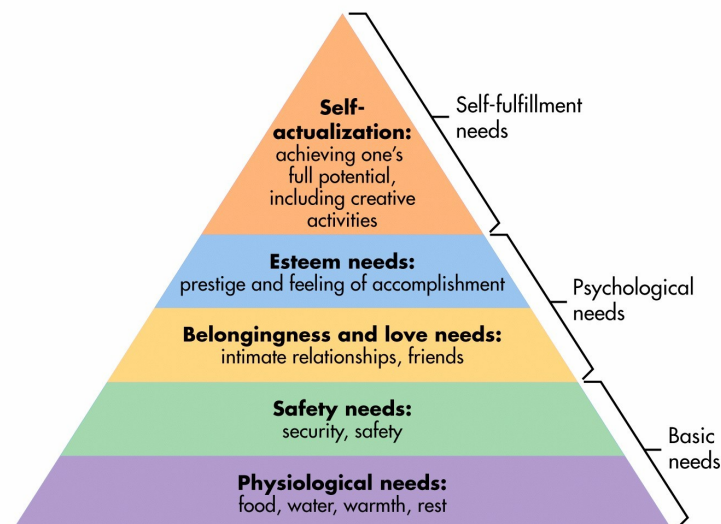


Figure 10. Hierarkhi need Maslow (McLeod, 2018)

The hierarchy in Figure 10 is viewed from the context of OECD economic classification Table, and the figure above shows that if a country is still struggling with its basic needs, it may lead to self-actualization which is even harder to surpass. The instinctual need, according to (Gautam, 2019) is *the instinctual need of humans to make the most of their abilities and to strive to be the best they can. This need, when fulfilled leads to a feeling of generativity.*

The instinctual need of humans to make the most of their abilities and to strive to be the best they can. This need when fulfilled leads to **a feeling of generativity.**

“Muslims are left behind in the field of science and technology for several reasons including: No commitment to science, neither applied science nor pure science; no strong desire to seek for the independence of science and technology (self-reliance); no sufficient and legal institutional frameworks in order to support the development of science; and the application of improper ways in running the management activities in science and technology.”

It becomes opportunities and challenges for Perguruan Tinggi Keagamaan Islam (PTKI) in OIC member states to take part in handling low scientific publications. The presence of faculty of science and technology at PTKI in OIC member state becomes a necessity, which is expected to be the solution for the lack of quality scientific publications. The faculty/ study program of science and technology at PTKI in its development and application has a distinction in the strength and integration of basic Islamic philosophy, thus it's not value-free, instead, it is aligned with the theology of *rahmatanlil 'alamin*.

The urgency of faculty/ study program of science and technology is evidenced in the lack of scientific publications in basic sciences, medical sciences, engineering, agricultural sciences, and veterinary sciences (Table 3), while the humanities studies dominate at 36%. The faculty/ study program of science and technology at PTKI requires proper learning and research methods in order to produce research results in the form of concrete products capable of supporting quality scientific publications for the economic development in OIC member states, instead of simply being obsolete displays in libraries. One effective method that can be used is Research and Development (R&D), producing proper scientific publications. The use of R&D methods in the



learning and research conducted by lecturers and students in PTKI may result in more concrete scientific publications.

Simulations carried out on PTKI in Indonesia by (Susilayati, 2012): *innovation in education can be done effectively and efficiently through final student project. In line with Dirjen Dikti's Letter No. 152/E/T/2012, starting from graduation after August 2016 enacted new rule: student must produce papers published in scientific journals to undergraduate for Bachelor program, students should have resulted in a paper published in national scientific journal preferably Dikti accredited to graduate for Master Program, and students should have resulted in a paper accepted for international journals publication to graduate the Doctoral program. Depend on data MoRA in 2013/2014, and there are 678 religious Colleges with 613.665 students. If almost all of them make innovation at least on the final project with R&D, it means that Indonesia will have 613.665 innovations published eligible, and much more in Kemenristek-dikti.*

The study fields of scientific publications with low specific opportunity for PTKI in Indonesia are agriculture, arts, basic sciences, engineering, humanities, medical sciences, and veterinary sciences. The study field of humanities excels with 10 scientific publications and a percentage of 2.59%, but it is still far behind Malaysia with 157 scientific publications and a percentage of 40.67%.

Indonesia is known as an agricultural country, but Table 4 shows that it ranks seventh with only 2 publications, only at 3.70% which is far different from Malaysia with 15 publications and a percentage of 27.78%. It becomes an opportunity and challenge for PTKI to contribute more scientific publications in the agricultural field. As an agrarian country, it is certainly the right land for the students and lecturers to perform R&D research for producing indexed innovations through scientific publications. PTKI is thereby required to be integrated, not disintegrated from the academic conditions and needs of the surrounding community.

Indonesia is also known for its rich culture, but Table 5 shows that there is no scientific publication in art studies. It seems to demand PTKI to produce scientific publications in art studies. Indonesian diversity can be a research opportunity in this field of study. For instance, IAIN Surakarta can make Javanese art and culture and their inculturation with Islam in local wisdom, songs, writings, and other cultural symbols.

SCI-indexed scientific publications in basic sciences studies are shown in Table 6 and Figure 4. Indonesia ranks 9<sup>th</sup>, with 3 publications out of 22 countries, with a total of 263 publications. The comparison is only about 1%, lagging far behind Malaysia with 126 publications, and a percentage of 47% out of the total publications in such field of study. Scientific publications in basic sciences studies will be strongly supported by the presence of general faculty/study program at PTKI. The concept of science integration can be one of the alternative opportunities for weak scientific publications in this field of study.

An overview of scientific publications in engineering studies presented in Table 7 and Figure 5 is not really satisfying. Indonesia ranks 10<sup>th</sup> with only 1 publication (0.68%), lagging far behind Malaysia which ranks first with 56 publications, approximately 38% out of the total indexed publications. Engineering science which is expected to be a bridge between the education and the company is yet synchronized. The optimization of the engineering studies is able to boost economic development in Muslim countries, including Indonesia. It should not always come from Public Universities (PU) only, but PTKI has the opportunity to bring this into realization as well, and even make it filled with religious values (of the world and hereafter).

Table 8 and Figure 6 show the Indonesian scientific publications in humanities studies are only 10, but it still ranks 9<sup>th</sup> (2.59%). Malaysia ranks first with 157 publications, about 40% of 386 publications from 25 countries. For PTKI, humanities studies are not uncommon. PTKI, therefore, should be able to produce Indonesian scientific publications as a result of the implementation of Three Pillars of Higher Education. The teaching, research, and community service can be a huge opportunity for creative ideas in these humanities studies.

The 18<sup>th</sup> place with 1 Indonesian scientific publication in medical sciences is presented in Table 9 and Figure 7. Indonesia has only a portion of 0.58% out of 173 publications in total from 22 countries. Iran ranks first with 68

publications, at approximately 39% of a total of 173 publications. It may be caused by an extremely small number of PTKI which have medical faculties in Indonesia; in fact, they're so few that people can count on the fingers on one hand. The metamorphosis from IAIN into UIN can be an opportunity to improve scientific publications in this field of study. The transition process from IAIN into UIN status along with its study of urgency can also become an opportunity to increase the number of scientific publications.

Based on the statement of the Directorate General of Islamic Education, the transformation of IAIN into UIN must have the characteristics of Islamic studies (teaching and research) based on the development of science and technology and develop community services. It's must be free from politics, the epistemology of scientific integration must be explicit, and have a scientific distinction that distinguishes existing science (Munadi, 2019).

The final data presented in Table 10 and Figure 8 demonstrate the absence of Indonesian scientific publication in SCI-indexed veterinary sciences. To the researchers' knowledge, currently, there is no faculty/ study program of animal husbandry/veterinary at PTKI. It may be the major cause of the lack of scientific publications in this field. All stakeholders of PTKI must take the initiative to open the faculty/ study program. Veterinary science is highly needed by the Indonesian community, which has a large number of farmers and breeders. Currently, many farmers and breeders still apply conventional methods in farming and breeding, leading to non-optimal outcomes. Technical innovations are therefore needed in that field for farmers so as to improve the development of the Indonesian economy.

## 5. Conclusion

The results demonstrate that the most widely owned scientific publications are from Malaysia, followed by Iran and Pakistan, which is over 100. The scientific publications, over 40 in number, come from Turkey, Saudi Arabia, and Egypt. The scientific publications, at around 14-24 in number, come from India, Jordan, Indonesia, and Azerbaijan. In addition to the 10 countries mentioned above, 20 other countries have approximately 1-7 scientific publications in average. The lack of scientific publications in Muslim countries becomes a great opportunity and challenge for Islamic universities in Indonesia for producing quality scientific publications, by means of using R&D and opening general faculty/ study program.

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# A Comparative Study of the Inclusive Education Policy in Vietnam and Malaysia: Proposed Solutions for Sustainable Development Education in Vietnam

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## Abstract

The main aim of this study is to analyse and compare the policies of inclusive education for handicapped people in general, and children with disabilities in particular. It focused on inclusive education for children with disabilities in Vietnam and Malaysia. The study has also highlighted the challenges and issues of inclusive education for children with disabilities in Vietnam and has compared with Malaysia. It has eventually proposed the solutions to the sustainable development of inclusive education for children with disabilities in Vietnam.

**Keywords:** Inclusive Education, Vietnam, Malaysia, Sustainability, Educational Development

## 1. Introduction

People with disabilities all over the world are abnormal and completely helpless. This stigma is one of the many ways people with disabilities are marginalized by society. Because most societies believe that people with disabilities are unable to do their own tasks, so they are usually excluded from all aspects of life: they do not have adequate health care and do not enjoy the learning opportunities due to the lack of facilities and accurate planning. Therefore, the education of people with disabilities in general, especially the education of children with disabilities in inclusive with the social community is being paid attention and focused on by many researchers (Sufean Hussin & Quek ai Hwa, 2012; Zalizan M. Jelas & Manisah Mohd Ali, 2015; Amar-Singh HSS& Alvin Teoh, 2018) and by domestic, foreign agencies and organizations. Inclusive education is a trend, a necessity of the times. At the Conference on Education for Children with Disabilities in Agra, India (March, 1998) organized by UNESCO confirmed the trend: Inclusive education for all children. UNESCO has set four goals for human training as follows: Learning to human; Learn to know; Learning to do; Learn to live together<sup>1</sup>.

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<sup>1</sup> United Nations Educational Scientific and Cultural Organisation (UNESCO). 1990. The world conference on education for all (Jomtien, Thailand). Paris: UNESCO.

Equal education is the goal of the UNESCO program “Education for All” (Education for All by 1990), which emphasizes education and integration for children with disabilities. Before you can integrate into society, children with disabilities should be really integrated, participating as ordinary members of the immediate environment of the child is also close as in society (UNESCO, 1990).

On October 18, 2011, the Southeast Asian Ministers of Education Organization (SEAMEO) identified inclusive education as the goal of Southeast Asian nations. Since 2008, SEAMEO has implemented 10 multinational projects, targeting disadvantaged people without access to education. In order to support inclusive programs, SEAMEO identifies a series of priority strategies: education for all, preschool, special education, emergency education, lifelong education. In particular, inclusive education is emphasized as the focus of the targeted programs of Southeast Asian countries. Inclusive education that educates Southeast Asian countries has focused on children with disabilities. Accordingly, regional countries such as Vietnam and Malaysia have had policy-making strategies for many years, opening up various modes of education, human resource training, strengthening facilities, equipment, and inclusive education research. Thus, the researchers have intended to analyze and compare inclusive education policies in Vietnam and Malaysia. At the same time, the study has highlighted the challenges and issues of inclusive education in Vietnam comparing with the case in Malaysia. Since then, it has proposed solutions to the sustainable development of inclusive education in the present and future in Vietnam.

## **2. Research Methods**

### *2.1. Methods of integrated research*

The researchers synthesize and analyze the data on inclusive education policies in Vietnam and Malaysia, collected from specialized books, magazines, scientific conference proceedings, scientific topics, and related documents.

### *2.2. Comparative research methods*

From the above sources, the researchers conducted analysis and comparison of inclusive education policies of Vietnam and Malaysia; they finally gave suggestions and solutions for sustainable development of inclusive education in Vietnam.

### *2.3. Group research methodology*

The researchers will gather into small research groups of inclusive education experts, have group discussions on inclusive education policies in Vietnam and Malaysia; thereby, they will offer a view to the sustainable development of inclusive education in Vietnam before setting education reform and international integration.

### *2.4. Method consult experts*

During the study, the authors have contacted and exchanged with experts in inclusive education in Vietnam and Malaysia to look for several sources and books to offer a model for inclusive education in Vietnam as well as giving lessons for Vietnam.

## **3. Exchange and Discussion**

### *3.1. Asian inclusive education policy*

The World Declaration on Education for All (EFA), adopted in Jomtien, Thailand in 1990, provides an overview: universal access to education for all children, youth. Annual and adult, promote equality. Career-oriented education is a process of strengthening the capacity of the education system to reach everyone and therefore, IE is considered an important strategy to achieve Education for all (EFA).

UNESCO's policy orientation on inclusive education (2009) provides arguments to work towards the implementation of inclusive and educational education for all, through discussion and discussion, group research give proposal:

- Education argument: Inclusive schools must develop ways to respond to differences and benefit all children.
- Social arguments: Inclusive schools can change attitudes towards diversity and form a model for a non-discriminatory society.
- Economic arguments: Schools let people save more than establishing and maintaining “special” schools for different groups of children.

For many decades, a series of legal documents such as international conventions, declarations, and recommendations are released, set the standard as a foundation base for the development of policies and procedures approaches to inclusive education. They set out the central elements that need to be addressed to ensure the Right to Education Access, the Right to Educational Quality, and the right to Respect in the educational environment. Inclusive education is based on the legal framework through international legal instruments such as conventions, recommendations, and international claims (UNESCO, 2009).

### *3.2. Inclusive education policy in Vietnam*

#### *3.2.1. The state actively participates in international conventions to ensure rights and benefits for children with disabilities*

Since the early 1990s, the Government of Vietnam has developed policies to ensure that children with disabilities have access to education. Currently, this issue has been mentioned in the national plan of the education and training sector "Inclusive Education until 2018 - 2020" with the goal of enhancing accessibility and improving the quality of education. Education accessibility, ensuring people with disabilities have access to quality education and equality. Specifically, by 2020, at least 70% of people with disabilities in preschool age and in general have access to inclusive, quality and fair education; at least 50% of managers, teachers, and staff support education for people with disabilities are trained and fostered in the education of people with disabilities, with at least 40% center to support inclusive education development in provinces and cities under central authority; 100% of provinces, cities, educational institutions are common and implement legal documents on education accessibility<sup>2</sup>. Therefore, Vietnam has actively participated in the international commitments and implement regional and inclusive education goals, Vietnam has built a solid legal framework at many levels.

At the international level, Vietnam has signed accede the UN on the Rights of Persons with Disabilities (UNCRPD) on 22/10/2007 and adopted the Convention on November 2014; ratified the UN Convention on the rights of the child on 01.26.1990 and ratified on 02.20.1990 under Resolution No. 241/NQ-HDNN of the State Council dated 02.20.1990. The Government of Vietnam is also committed to implementing the Biwako Millennium Action Framework towards an integrated, barrier-free, rights-based society in Asia and the Pacific, in the period of 2003- 2012, offering policy recommendations for governments and stakeholders in the Asia - Pacific region on solving problems and developing action plans for an integrated society<sup>3</sup>.

Ensuring equal rights and access to education for children with disabilities is reflected in many legal documents of Vietnam such as: The first Constitution of the Democratic Republic of Vietnam in 1946; The Constitution of 1959, 1980, 1992, and 2013 all stipulate the protection of civil rights, prohibiting all acts of discrimination and mistreatment. In addition, the Laws and Laws have separate Chapter, section, or some specific provisions for people with disabilities regarding policies, assistance, and care solutions. Vietnam also has a system of legal documents referring to the rights of children with disabilities and access to education.

#### *3.2.2. The State guarantees the rights and responsibilities involved, complete education for children in educational establishments*

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<sup>2</sup> Electronic Portal Ministry of Education and Training of Vietnam (2018), Many difficulties in educating children with disabilities, Access on November 13, 2018.

<sup>3</sup> Convention on the Rights of Children. National Political Publishing House. Hanoi, 1992; Ministry of Education and Training, 2007, Inclusive Education Management, Women's Publishing House; Ministry of Labor and Social Affairs, UNICEF (2009), Construction Environmental Protection Vietnam Children: Review of laws and policies to protect children, especially children with special circumstances in Vietnam, Publisher Culture - Information; Vu Ngoc Binh (2001), Human Rights and the disabled, Published Labor - Society.

*- For normal children*

Vietnam's Constitution stipulates that “the State Children, family and social protection, care and education” (Article 37) and “Citizens have the right and obligation to learn” (Article 39). Article 61 of the Constitution provides that “The State shall prioritize investments and attract other investments for education; ensuring primary education is compulsory, the State does not charge fees; gradually universalize secondary education”<sup>4</sup>.

Realizing the provisions of the Constitution, Vietnam has issued and implemented a number of laws aimed at “ensuring equal rights to participate in education for all children regardless of ethnicity, gender, belief, religion, composition, social status” and “prohibit obstruction of children's education” (Articles 4 and 7 of the Law on Protection, Care and Education of Children)<sup>5</sup>. Children have the right to education, learning, and developing talents. Children have the right to education and learning to develop and promote their own potential comprehensively. Children are equal in learning and education opportunities; Developed talent, gifted, creative, inventive<sup>6</sup>.

Not only encouraged, ensuring the right to participate in learning, policies of Vietnam also participated in mandated universal primary education for all children in the age<sup>7</sup>. With the goal of improving people's knowledge, training human resources and fostering talents, the State stipulated in the law on universal primary education and junior secondary education. All Vietnamese citizens of the prescribed age are obliged to learn to achieve primary education. That means that all children of Vietnam school age have the right and obligation to make secondary education and basic secondary education.

Implementing the provisions of the law, Vietnam has developed the education development strategy 2018 - 2020, which has set the goal: "By 2020, the right attendance rate at primary school is 99%, junior high school is 95%, and 80% of young people between the ages achieve educational level high school or equivalent; 70% of disabled children go to school "<sup>8</sup>.

Affirming implementation of this objective, Resolution 29 of the Executive Committee of the Politburo of the basic renovation, comprehensive education, and training of Vietnam has set a target "Improving the quality of education, real now 9 years' compulsory education since 2020. Striving to 2020, 80% of youth aged qualifications high school education or equivalent" <sup>9</sup>.

Thus, through systematic analysis of legal documents on the discussion, the authors unified view, the rules in the policy ensuring that all children can participate and have the responsibility to participate in education, universal primary and junior high quality and can continue studying at the higher level.

*- For children with disabilities*

Inclusive education is a method of education to meet the needs and abilities of different learners; ensure equal rights to education, quality of education, in accordance with the needs, characteristics, and abilities of students; respect for diversity, a difference of learners and non-discrimination. State policies to support the implementation of inclusive education for learners are children with special circumstances prescribed by Law Children, students with disabilities in accordance with the provisions of the Disability Law and other regulations law-related<sup>10</sup>.

Children with special circumstances can live in all localities in all regions should participate in education and completion of education, the child should be at school most convenient and unimpeded by conditions, socio-economic situation. Thus the network of public schools in all localities should be best prepared to take all the

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<sup>4</sup> Vietnamese Constitution 2013.

<sup>5</sup> Law on Protection, Care and Education of Children in 2004

<sup>6</sup> Article 16 of the 2016 Children's Law replaces the 2004 Law on Protection, Care and Education of Children.

<sup>7</sup> Article 14, Education Law 2019

<sup>8</sup> Electronic portal Ministry of Education and Training of Vietnam (2018), many difficulties in the education of children with disabilities, access date 13/11/2018.

<sup>9</sup> Resolution 29 of the Party's Central Executive Committee of fundamental innovation, comprehensive education and training Vietnam

<sup>10</sup> Article 15, Education Law 2019.

children to class. Education also requires schools where children live or not an exemption of tuition fees and are willing to help the media, essential teaching aids for students with special circumstances. Teachers who directly educate and teach need to apply the provisions of the law to mobilize and ensure conditions to help children with special circumstances to implement primary education universal at the right age.

Each child with special circumstances has different conditions and circumstances, so participating in education and completing universal primary education will not be the same. Therefore, the State has set up various policies to support all children to achieve their right to universal education.

In some of the Code stated, "All citizens, regardless of ethnicity, religion, creed, sex, family background, social status, economic circumstances are equal learning opportunities. State implements social justice in education, create conditions for everyone to education. State priorities, enabling children of ethnic minorities, child families in areas with economic conditions, especially social difficulties, those entitled to preferential policies, the disabled and handicapped and other social policy beneficiaries who exercise their learning rights and obligations"<sup>11</sup>. For secondary education, students are learning beyond the classroom, learning in higher age-old rules in the following cases: "Students in higher age-old provisions in the event of biological repetition, learning born in regions where economic conditions - especially social difficulties, students are ethnic minorities, students with disabilities, students underdeveloped physical or intellectual, students orphaned nowhere refuge, students from poor families, students abroad return home and other cases prescribed by law"<sup>12</sup>.

This is also confirmed and concretized more in Disability Law. Article 27 of the Law on Persons with Disabilities states: "The State facilitates people with disabilities to learn in accordance with the needs and abilities of people with disabilities. Persons with disabilities are enrolled in higher age than the age prescribed for general education; priority in enrollment; exemption, reduction of some subjects or educational content and activities that the individual's ability cannot meet". Under this regulation, students with disabilities will be adjusted to the program in the direction of "exemption or reduction." About some content and subjects. The course content and remaining under the program must ensure that general education.

The Law also stipulates the institution responsible and obliged to create conditions for children with disabilities may attend integration. Article 30, Disability Law stipulated the institution must "Ensuring the conditions of teaching and learning is inappropriate for people with disabilities, can not refuse to receive disability admission contrary to the provisions of law. Implementing the renovation and upgrading of teaching and learning facilities has not ensured access conditions for people with disabilities".

To concretize the object child has special circumstances should receive assistance in participating in education, social activities, the Law on Protection, Care and Education of Children with regulations: Children complete Special scenes include helpless orphans; abandoned children; disabled children, disabled; children are victims of chemical toxins; children living with HIV/AIDS; children must work hard, dangerous, exposed to toxic substances; children work outside the home; Street children; sexually abused children; children addicted to drugs; children violate the law.

Thus, legally, Vietnam has ensured equal opportunities to participate in and complete education for all children, including children with special circumstances, access to education. However, one of the reasons resulting universal education for all children has yet to be achieved because of this regulation, and it is not really close to reality and the specific policies and implementation not good, so efficiency is not achieved as expected.

#### *- Inclusive education centers*

Education law stipulates the following system of schools and centers for people with disabilities: The State establishes and encourages organizations and individuals to establish schools and classes for people with

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<sup>11</sup> Article 13, Education Law 2019.

<sup>12</sup> Article 28, Education Law 2019.



disabilities to help people with disabilities be subdued. Rehabilitation, education, vocational training, and community integration. State prioritize the allocation of teachers, facilities, equipment, and funding for schools and classes for the disabled established by the State; have preferential policies for schools and classes for people with disabilities by organizations and individuals to set up<sup>13</sup>.

Disability Law also considers the difficulty of each object learners with disabilities and to make provisions for the Center to support the development of inclusive education in Article 31:“Center supports development of education integration is the base program content providers, equipment, teaching and learning materials, advisory services, educational support, educational institutions conform to the characteristics and circumstances of persons with disabilities”<sup>14</sup>. Ensuring learning conditions, universal primary education for all children, Vietnam was considered a special policy to support learning disability.

Therefore, for a system of schools, education centers for children with disabilities need to ensure facilities and equipment; teachers have quality and professional competence; Data systems include: textbooks, documents, open information systems to meet the needs of the education and training of disabled children integrate into society.

### 3.2. Inclusive education policy in Malaysia

*- The orientation of the Malaysian government through participation in the legal system and international treaties on inclusive education*

Inclusive education has been introduced in the Education Act of Malaysia from 1996 as part of the tasks of the services available for children with special needs to ensure children a healthy life, comprehensive educational environment that aims to integrate into the community for children in extremely difficult circumstances<sup>15</sup>.

Under the auspices of the United Nations, represented by UNESCO, the Malaysian Government has actively participated in conferences, sponsoring the rights of disadvantaged children, in order to show the nation's voice in protecting the legitimate rights and interests of children to integrate into society.

Education (UNESCO 1994), emphasizes the importance of national development, policy-making capacity, and management of inclusive education support, the need to address equal educational opportunities and access with all children including those with special education needs (SENs). Then, inclusive education was introduced in the Malaysian Education Act 1996, along with provisions for disadvantaged children in learning<sup>16</sup>. Although great strides have been made in terms and allocations for special needs education in Malaysia. It is this, bringing inclusive education in Malaysia to develop rapidly and strongly in the region, learning from Malaysia is an expensive lesson for the sustainable development of inclusive education in Vietnam.

From this concept, inclusive education will be discussed to contribute to the development of Malaysia's school culture and the general education system. Inclusive education is a concept derived from the agenda of the Government of Malaysia, the program of the Organization and abroad in Malaysia; Since then, the concept of special education is defined in the 1996 Education Act, and its approach is addressed to combine tradition and modernity in the development of inclusive education policies for children. I have a particularly difficult situation now.

The debate and inclusive education began with an introduction to the development of special educational needs for children with disabilities. Since then, inclusive education has been developed into a discipline, a career in Malaysia, and its impact on the development of policies and practices for the sustainable development of inclusive education in Malaysia.

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<sup>13</sup> Article 63, Education Law 2019.

<sup>14</sup> Article 31, People with Disability Law 2010.

<sup>15</sup> Education Act 1996, 1998. (Act 550) Part IV, National Education System. Chap. 8. Kuala Lumpur: International Law Book Services

<sup>16</sup> Jelas, Z.M. 1996. Pre-service teacher education in Malaysia to meet special needs in the classroom. In Partnerships in teacher development for a New Asia, ed. Rupert Maclean, 262–71. Bangkok: UNESCO.

*- The development phase of the inclusive education*

History of education for special needs in Malaysia is equivalent to the development of the educational system, professions related to inclusive education with the aim of helping and supporting developing countries worldwide (Ains, M.1994). Early inclusion education professionals rely on providing knowledge, encouraging sustainable development of inclusive education before a career occurs in a country. (i) First, the experts advise, support and provide services related to inclusive education were trained abroad; (ii) The second phase after this first stage sees colleges and universities set up programs and departments to teach discipline and prepare experts; (iii) The third stage is when colleges and universities import knowledge from abroad to achieve specific standards for disciplines in more developed countries. In this stage, concepts, theory, and implementation models are found in more developed countries taught, applied and tested; some of which may turn more successful than others; (iv) The fourth stage is the stage of domestic technological development and research to formulate essential concepts, theories, practices, and technologies to enhance knowledge about practice; (v) The fifth stage is also the final stage of acquiring new knowledge, development in a country is integrated into the greater mechanism of general education and sustainable development of inclusive education, in particular, System of inclusive education was developed from stage to stage, which focuses on developing infrastructure, system of learning materials and teachers who have the power, necessary to enhance the quality, investment Maintaining teachers attached to the actual experience<sup>17</sup>.

*- The school system and inclusive education program*

Inclusive school system: Inclusive education in Malaysia entered the first phase when the school for the blind was opened in 1929, then a deaf school in 1954. These schools are program was launched by the Ministry of social welfare, with the help of educators, religionists school<sup>18</sup>.

The Malaysian education system entered the second stage when professionally preparing special education programs officially established by the Ministry of Education of Malaysia (MOE) in 1961. Due to lack of expertise and technology, Malaysia participated in the third phase, which began importing knowledge and expertise by sending educational experts abroad to obtain evidence of research on inclusive education in the 1980s and 1990s. To date, the Malaysian inclusive education system tries to customize what has been learned from its national conditions. Malaysia participated in workshops, international conferences and activities of the United Nations and UNESCO, the further reforms as reflected in the Education Act 1996 (1998), describes the positive development of the changes in policies and practices in this period.

*Inclusive education program*

Education for children and youth with special needs is provided by two agencies: the Ministry of Education and Training and the Ministry of Women, Family and Community Development (MWFCD). MWFCD adopts the Ministry of Social Welfare and provides learning services and training skills for children and youth with (i) severe disabilities, (ii) serious and profound intellectual disabilities; and (iii) multiple disabilities. Skills training and learning services are conducted in collaboration with non-governmental agencies and community-based rehabilitation centers (CBR)<sup>19</sup>.

MOE's special education department is responsible for coordinating all special education programs in schools and continuing education centers to serve students with hearing and vision impairments. The child is determined to have (i) Down Syndrome, (ii) Autism light, (iii) Retardation, (iv) disorder hyperactivity, inattention and (v) specific learning disabilities are placed in closed special classes in learning disabilities<sup>20</sup>.

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<sup>17</sup> Clark, C., A. Dyson, and A. Millward. 1998. *Theorising special education*. London: Routledge.

<sup>18</sup> Carrington, S., and R. Robinson. 2006. Inclusive school community: Why is it so complex? *International Journal of Inclusive Education* 10: 323–34.

<sup>19</sup> Peters, S.J. 2004. *Inclusive education: An EFA strategy for all children*. Washington, DC: World Bank.

<sup>20</sup> Carrington, S., and R. Robinson. 2006. Inclusive school community: Why is it so complex? *International Journal of Inclusive Education* 10: 323–34.

However, in order to qualify for the development of special education to ensure the educational position based on children's educational ability, is assessed by a group of experts. This is recorded in the Education Act of 1996 (1998, 342), which states:

- (i) With regard to the government and government support, students with special needs who can education be participating special education except for the students the following: (a) school students with physical disabilities learning ability as normal students; and (b) students with multiple disabilities or profound physical disabilities or severe mental retardation.
- (ii) A student with special needs may be educated if he can manage without help and is endorsed by a committee of a medical doctor, staff from MOE and an official from MWFCD's Welfare Department, capable of undergoing a national education program<sup>21</sup>.

Some issues and conflicts arise when we analyze these policies with eligibility criteria. While the current public policy for children with special needs is for children with learning disabilities, people with disabilities have access to ordinary schools as outlined in the Act, the education criteria of education. In line with the objectives of providing equal educational opportunities as defined in the United Nations Standard Rules for Equalization of Opportunities for Persons with Disabilities (1993), Salamanca Declaration (1994) and Framework Biwako millennium for action (UNESCAP 2002).

The mission aims to promote equal rights and access to education for people with disabilities. Criteria 'of education educational assumption that there are children who are not enrolled in the public school system, and so these children served in settings CBR (UNICEF, 2009). The CBR program is government-based programs at the community center to provide an education, which emphasizes treatment and rehabilitation for children with learning disabilities (Kuno, 2000).

The CBR program is quite separate from the school system. However, in practice, the division between both terms is less clear, and students should benefit from becoming victims of bureaucratic procedures (Adnan and Hafiz 2001). According to Adnan and Hafiz (2001), the application of diagnosis and procedural work is a long and difficult process that requires testing from different health professionals to testify about the validity of complaints. Even if they can be certified with a disability, it does not mean that the child is automatically eligible for educational regulations.

In inclusive education, a student with or without special education needs poses a big problem for Malaysian education. Before the special programs available, students with special needs are described by their characteristics and by the teaching challenges they face. When the education system started to meet the needs of each group of students with special needs, service setup, and eligibility criteria determined. From that point onwards, if a child is identified as having or experiencing special needs in education, and if he or she can manually manage without help (Education Act 1996, 1998), the child will qualify for a certain program or service.

This process is repeated when each group of students with special needs emerging, for example, blind children and hearing in the 1960s, children with intellectual disabilities slightly in 1980 and 1990 and more recently, children with attention deficit hyperactivity disorder and dyslexia children. Therefore, it is stipulated in the Education Act 1996 (1998) that the views of the experts, a medical doctor, an officer from MOE and an officer from the Ministry of Welfare of MWFCD, most powerful in determining how children are classified and whether the child is capable of experiencing.

Policymakers, experts, continue to advise in schools and classrooms, in particular, ensure strict compliance with the provisions of the Education Law of Malaysia. Responses at the management level for learning difficulties are issues that require specialized knowledge in normal classes with normal children (Education Act 1996, 1998, 341). In this context, MOE considers discrimination the right to education in a separate environment from the

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<sup>21</sup> Dyson, A. 1990. Special educational needs and the concept of change. *Oxford Review of Education* 16, no. 1: 55–66

mainstream, following the principle of integration and includes children with special needs if possible and retains the right to separate when needed (Ainscow, M. 1994).

### 3.3. Comparison inclusive education policy in Vietnam and Malaysia

#### *The general*

Vietnam and Malaysia are two countries in the ASEAN region. At the end of 2015, the ASEAN community was born with three main pillars: security - politics, economy, and culture - education. Therefore, these two countries have similarities in education and inclusive education with the goal of sustainable development for inclusive education in the present and future.

Inclusive education from a regional perspective Asia-Pacific Region (Sufean Husin&Quek Ai Hwa, 2012):

+ *Conventional perception*: In many Asian countries, the term inclusive education does not exist or is not recognized by all; otherwise, it refers to education for children with disabilities.

+ *Broadened conceptualization as a point of comparison*: A general guiding principle to strengthen education for sustainable development, lifelong learning for all and equal access of all levels of society to learning opportunities (UNESCO, 2008).

+ *Some regional issues and challenges*: a) Early childhood care and education (ECCE); b) Exclusion in Primary and Secondary Education (especially for children with disabilities, children affected and/or infected with HIV/AIDS, children from ethnolinguistic minority groups, children of illegal migrant workers, refugee children, girls); c) Non-formal education; d) Fragmentation and low quality of teacher training.

+ *Some regional policy priorities*: a) Raise awareness around the broadened concepts and practices of inclusive education; b) Design coherent and sustainable policies to address the issues of social exclusion and anti-discrimination laws; c) Adopt inclusive teaching and learning practices into the regular pre-service teacher training programs; d) Initiate early intervention programs; e) Create a database of children to monitor the progress of inclusion; f) Pay special attention to children affected by war, civil strife and natural disaster; g) Provide health services for children in a child-friendly way and offer voluntary testing, counseling and treatment for HIV/AIDS and related illnesses.

+ *Some regional initiatives and practices*: a) Develop inclusive education policy in countries (i.e, Vietnam, Laos, PDR, Timor-Leste and Pakistan); b) Establish pilot inclusive schools (i.e, Afghanistan, Indonesia, Malaysia and Pakistan); c) Improving inclusive teacher training (i.e., Brunei, Darussalam); d) Promoting awareness and positive attitudes towards inclusion (i.e, Indonesia, Malaysia and Mongolia).

#### *The different*

Vietnam and Malaysia are two countries in the Asia - Pacific. Unlike Vietnam, Malaysia is a multi-religious, ethnic, and resident country. However, policy on education and training in general and policies on inclusive education between the two countries are different law, school systems, programs, and teachers.

Table 1: Comparing inclusive education's policy of Vietnam and Malaysia

Vietnam	Malaysia
<b><i>The domestic legal system provides for inclusive education policy</i></b>	
The Constitution, the Law on Education, Disability Law and the guiding documents;	Malaysian Education Act, Malaysia Special Needs Education Law and other documents and laws mapped into inclusive education regulations.
<b><i>School system</i></b>	
The system of inclusive education schools in Vietnam includes: Center for supporting inclusive education development, Center for children with disabilities, Special education institutions, Special schools for children with disabilities; the institution of disabled children increased, especially elementary and preschool, with a significant number continue to secondary school & high school.	School system for inclusive education was formed on the basis of: School for the Blind in 1929; School for the deaf in 1954; central system of inclusive education and private companies active. Inclusive school system established and developed in parallel with the public educational establishments
<b><i>Inclusive education program</i></b>	
In Circular No. 30/2014 / TT-BGDĐT, August 28, 2014, issued regulations evaluate primary pupils, in Article 12 also	Programs in regular schools. The terms students have special needs, and programs for special education was

<p>for a separate item for evaluation of inclusive education of students with disabilities: "For students with disabilities who follow inclusive education methods, if the student's ability to meet the general curriculum requirements is assessed as for normal students but with a slight decrease demand for learning outcomes. Subjects or educational activities that students can not afford to meet the general requirements shall be assessed at the request of the individual education plan".</p> <p>In Vietnam, the system of special schools for kindergarten thrive, separately; ensure the quality of child education to grow at the right age, integrate with the social community. Inclusive education programs for preschool children are built by educational experts from developed countries, and even, many institutions buy foreign education rights.</p>	<p>introduced in the Education Act 1996 (1998, 341) is defined as follows: Students with special needs, which means school born blind, deaf or learning disabilities. Special education program means:</p> <p>(i) A program is offered in special schools for students with impaired vision or hearing impairment;</p> <p>(ii) An integrated program in schools for students with visual, hearing, or learning disabilities; and</p> <p>(iii) inclusive education program for students with special needs and who can join normal classes with normal students. The term inclusive education, introduced in the Act as part of the continuity of services for children with special needs. Education in Malaysia is mainly being driven by an orientation test system (MOE 2006b) characterized by rigidity in the curriculum and pressure to do well on exams (Hamzah 2007).</p>
<b>Teachers</b>	
<p>With a team of teachers to be trained from the institution prestige in the country, teachers in inclusive education are those who have knowledge expertise, ethics, and dedication to children with disability.</p> <p>The institution regularly organizes training courses for teachers in order to improve the capacity of teachers, and she let them completely confident in his class with students with disabilities.</p>	<p>In 1993, Malaysia prepared an integrated teaching staff, bringing teachers to train in the UK and other countries to serve the country. Teachers are responsible for building and developing inclusive education curricula.</p> <p>Inclusive education in Malaysia is seen as an important issue; educators, teachers, and policymakers are serious about the experience and training of students with special needs in mainstream schools because of competitive priorities in the school system.</p>

### 3.4. Proposing solutions for sustainable development of inclusive education in Vietnam

Through analysis and comparison of inclusive education in Vietnam and Malaysia, the authors propose a number of solutions to the sustainable development of inclusive education in Vietnam in the current period as follows:

- Inclusive Education in Vietnam needs to improve the system strong enough legal documents to ensure equal opportunity to participate in inclusive education with high quality of CWD. Inclusive education of children with disabilities are areas that need to be resolved with the participation of different sectors. Therefore, there should be consistency in the legal text of the industry on this issue.
- Develop a management agency under the Ministry of Education, and Vietnam Gào create enough functions and duties to direct and manage the education of children with special circumstances. Besides, the functioning management system of schools, inclusive education centers, programs, and teachers.
- Collaborate in developing multidisciplinary criteria identified special needs children. Develop criteria for identifying children with special needs with a full range of types, levels as a basis for the development of educational programs, learning materials, and support policies for inclusive education special needs children.
- Improve the quality of training and retraining of human resources, especially teachers, to serve inclusive education for children with disabilities. Teachers who directly organize and implement educational programs. Preparing teachers for inclusive education is a task to be done within the training institutions of teacher training. The fostering of inclusive education for teachers should be put into regular operation plan of the sector annually.
- Develop a network of Inclusive Education Support Centers in all provinces/cities in Vietnam: Teachers and students at inclusive educational institutions need regular support and advice. Center supports inclusive education quality assurance function properly defined in the Disability Law will stand for the sustainable development of inclusive education in localities in Vietnam.
- Construction services network inclusive education of children with disabilities: To develop inclusive education quality, the services of information, advice, support and provide the facilities, teaching aids should be developed wide open to every locality nationwide.
- Strengthening information and propaganda on inclusive education: Expanding information and propaganda about inclusive education to all people. In educational programs, textbooks/teaching materials should focus

on educational participation of children with disabilities, avoiding biased content, discrimination against persons with special circumstances.

- Strengthen cooperation, enlist the support of individuals and organizations in educating children with special circumstances. Many domestic and foreign individuals and organizations are supporting the education of Vietnamese children with disabilities. Therefore, building a general plan and mobilizing the participation of individuals and organizations in a scientific way will make better use of the resources, experience of individuals, organizations, and advanced, effective inclusive education.
- Create output for CWD education (colleges and vocational training and employment). With interest, the investment by the State in the implementation phase basic reforms, comprehensive education in Vietnam is full of enthusiastic supporters and willing to participate, individuals and international organizations actively support, if timely applied practical solutions that are inclusive education will definitely achieve rapid development and sustainability. The target of ensuring equality of opportunity to participate in and complete education of children with special circumstances, including children with disabilities, will become a reality.

#### **4. Findings**

First, inclusive education policies of Vietnam and Malaysia are subject to the provisions of international treaties and the provisions of the Education Law in general and inclusive education law of the country in particular;

Second, the big difference between inclusive education of Vietnam and Malaysia's educational programs and teachers. If in Vietnam, only the inclusive education system in preschool is separate, and the program and teachers of inclusive education at a primary and higher level are students with special needs studying in the same chapter. Submit to normal students. This, as well as an inadequate teacher during teaching and curriculum development. In Malaysia, systematic education of students with special needs in particular, therefore, from the teachers to the program and team, testing the quality of Malaysia was done methodically, systematic and scientific.

Third, the training of teachers for inclusive education, if in Malaysia, teachers for inclusive education to be sent overseas training from 1993. In Vietnam, the training process, as well as inclusive education study, be done later. So far, the system of inclusive education centers, special schools in Vietnam to develop a large scale, reliable in quality. However, Viet Nam's inclusive education needs to learn Malaysia's lessons about training in schools, developing programs, and developing sustainable, inclusive education in Vietnam in the present and future.

#### **5. Conclusion**

As countries in the ASEAN educational culture community, in the direction of sustainable development of inclusive education in Vietnam and Malaysia, these two countries have focused on improving policies and laws related to the Inclusive education. In particular, the two countries are involved in international conventions to protect the legitimate rights and interests of people with disabilities with special needs. Specific development of inclusive education system as the basis of system development of inclusive education, training programs, and teaching staff. Although there are differences in the education system, in strategic education and training in Vietnam and Malaysia are oriented to sustainable development of inclusive education, with the goal of "do not let anyone behind," ensuring for people with special needs to soon integrate with the social community.

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# Internationalisation and the Global Citizenship of University Graduate Students

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## Abstract

This paper is based on the quantitative findings of a mixed-methods research that explored the effect of internationalisation of higher education (IoHE) on the global citizenship (GC) of graduate students. Specifically, the study sought to find out the effect of internationalisation of academic staff, curriculum, and the student community on the GC of graduate students at Makerere University in Uganda. Using the sequential explanatory research design, data were collected from 180 respondents via a partially-adapted self-administered questionnaire and analysed using appropriate descriptive and inferential statistics. Findings showed, among others, that the IoHE in terms of academic staff ( $R=0.236$ ;  $R^2=0.056$ ;  $p=0.01$ ), the curriculum ( $R=0.250$ ;  $R^2=0.062$ ;  $p=0.01$ ), and student community ( $R=0.202$ ;  $R^2=0.041$ ;  $p=0.007$ ), all had statistically significant positive effects on the GC of graduate students. These findings reinforced the earlier belief that the more internationalised a university is, the more likely its graduate students would become global citizens; thus, significant efforts need to be made to internationalise these, and other aspects of university operations. Indeed, this work presents to university management aspects of IoHE that greatly impinge on the GC of graduate students. No earlier works had similar results in the context of the global south where IoHE has not yet taken root.

**Keywords:** Internationalisation, Global citizenship, Higher education, Graduate students, University

## 1. Introduction

World over, education is regarded as a critical means to national development and global competitiveness of countries and their graduates (Bloom, David-Canning, & Kevin-Chan, 2014; Schoole & Knight, 2013; Jowi & Obamba, 2013; Teferra, 2014). This is so especially with graduate education that equips students with skills needed for competitiveness. However, today, it is increasingly becoming important for universities to equip graduates with new competences and skills that will help them to live and work in a rather globalised world. In fact, as globalisation becomes a contemporary reality, higher education institutions (HEIs) have been tasked to produce global citizens. According to UNESCO (2015) and the International Association of Universities [IAU] (2012), higher education (HE) should foment graduates to be critical and ethical thinkers, informed, and socially-



connected individuals who are able to promote peace, prosperity, and sustainability in the world. This desire for having HEIs to produce socio-economically relevant graduates has been re-echoed by the UN which emphasises fostering GC as one of the priorities of the Global Education First Initiative [GEFI] (UNESCO, 2014). Consistent with the global demands, the Uganda Vision 2040 (Government of Uganda [GoU], 2012) and the Uganda's Ministry of Education and Sports (MoES) sector strategic plan - 2007 to 2015 (cited in Makerere University, 2008) - also emphasise the need for having a HE sector that is responsive to the global environment.

Within this context of heightened interest in GC, HEIs world over have attempted to incorporate into their core activities, the international dimension of educating students. Consistent with this global trend, Makerere University has equally taken a strategic move towards internationalisation (see, Makerere University, 2008). However, hitherto, the nexus between her effort to internationalise and the GC of her graduates have not been sufficiently scrutinized. Elsewhere, Lilley, Barker, and Harris (2014) have argued that internationalisation of education is a key priority of universities today; yet, its benefits to students has persistently remained a lesser priority in many HEIs. Clifford (2009) has as well claimed that the concept of internationalisation as being for preparing students to "live and work in an internationalised multi-cultural world are less frequently discussed" (p.134). In this paper, however, the authors have considered how an internationalised HE in terms of academic staff, curriculum, and the community of students can be predictors of the GC of graduate students.

Theoretically, this study was anchored on the Transformative Learning Theory (TLT) advanced by Mezirow in 1991. According to the theory, new values, beliefs, and meanings are created or existing ones strengthened through an educational experience. The theory focuses on how people learn to negotiate to confront unfamiliar situations, to evaluate their values and those of others, understand social complexity through strong values of tolerance, social justice, and equality (Mezirow, 2000). It also considers how informed, free human choice, critical thinking, moral reasoning, self-awareness, and empathy are used as the outcomes of an educational experience. The theory assumes that learners become more liberated, socially responsible, and autonomous thinkers who are able to make informed decisions by becoming more critically reflective as dialogic thinkers through their engagement in a social context (Mezirow, 1991). In this regard, Mezirow opined that experience is the starting point for transformation and reflective dialogue; but practice is the ultimate evidence that transformation has occurred. From this theoretical point of view, the researchers hypothesized that students' experience with internationalised academic staff, curriculum, and other students of international status in various university activities has the potential to transform their beliefs and knowledge; thus, making them able to see and interpret the world from the local and global perspective - a hunch that this study intended to verify from the beginning. The TLT was also preferred in the study because it has been severally used in such research circumstances by other scholars (see, e.g., Clifford & Montgomery, 2015; Hanson, 2010; Lilley, 2013; Lilley et al., 2015) to gain a deeper insight into the impact of IoHE on GC.

Conceptually, this study focused on two key variables: internationalisation of higher education (IoHE) and global citizenship (GC). The concept IoHE has been variously defined by different scholars, but perhaps the most acceptable of those definitions is the one given by Knight (2008). Knight defined IoHE as a process of integrating an international, inter-cultural, and global dimension into the functions and delivery of HE. This definition looks at internationalisation in its totality - highlighting both cross border-education and other internationalisation activities at home. Drawing from Knight (2008), IoHE in this study was conceived to mean the integration of international, inter-cultural and global dimensions into the delivery of university programmes at Makerere University with the view of helping students develop international awareness and inter-cultural skills that can enable them to live and work in today's globalised world. But, the study also considered the conceptualisation of IoHE by Gao of 2015. According to Gao, IoHE is a multi-dimensional concept which looks at the different aspects of HE delivery including: governance and organizational support, students, academic staff, curriculum, and research and community engagement dimensions. In this study, however, IoHE was restricted and looked at in terms of the internationalisation of academic staff, curriculum, and student community.

According to Gao (2015), Sanderson (2008) and Brigham (2011), academic staff internationalisation refers to the way by which the academic team is internationalised and how the members of the academic staff integrate global

and inter-cultural perspectives in their teaching process. In that regard, internationalisation of academic staff in this study was looked at in terms of: presence of international staff, global experience, and perspectives of academic staff, acknowledgment and response to diversity by academic staff, use of foreign experiences to deliver lessons, use of international academic resources, and appreciation of cultural differences and open-mindedness of the academic staff.

Meanwhile, the internationalisation of curriculum generally refers to the incorporation of an international and inter-cultural dimensions into the content of the curriculum as well as the teaching and learning processes and support services of a programme of study (Leask, 2009). In this study, however, internationalisation of the curriculum was characterised by the incorporation of international perspective into the content of what must be taught and learnt (e.g., International languages, international courses, and comparative studies) as well as the conducting of joint teaching with an international university, and conducting of compulsory international internships.

The third aspect of IoHE that was studied was the internationalisation of the student community. According to Gao (2015) and Spencer-Oatey and Dauber (2017), student community internationalisation refers to the campus programmes and activities that bring about the integration of local and international students. In this study, student community internationalisation was looked at in terms of those activities which had the presence of international students such as international internships, workshops, conferences, joint national and international orientation programmes as well as clubs and associations that provide for the mixture of domestic and international students.

The other key concept that was looked at in this study was global citizenship (GC). This is also another concept which is difficult to define or be understood perhaps because the debates surrounding its meanings are still ongoing. But according to Nussbaum (1997), GC refers to the condition of giving one's primary loyalty to human beings irrespective of where they are in the world. This view about GC was also re-echoed by UNESCO in 2015 when it conceptualised it as a sense of belonging to a broader community and common humanity. It is this meaning of GC that was adopted for this study. According to Morais and Ogden (2011), feeling a sense of belonging to a broader community involves individuals and communities taking social responsibility for the events happening in the world. It also involves individuals developing global competence and engaging in global civic activities wherever they are in the world. In this study, the researchers borrowed this conceptual model and looked at the GC of graduate students at Makerere University in terms of their ability and willingness to take up social responsibility, engage in global civic activities, and develop competences that can enable them to live and work in any part of the world.

According to Morais and Ogden (2011), social responsibility refers to the individual's concern for others and for the environment. In this regard, socially responsible students are those that evaluate social issues and identify with efforts against global injustice. They also respect diverse perspectives and promote an ethos of social service to address issues with the understanding of the inter-connectedness between local behaviours and their global consequences. In this study, the social responsibility of graduate students was characterised by: awareness of social responsibility, global justice, and altruism and empathy. Global competence, on the other hand, refers to having an open-mind that actively seeks to understand other people's cultural norms and expectations (Morais & Ogden, 2011). According to these two scholars, globally competent students recognise their own strengths and limitations in engaging in inter-cultural encounters; demonstrate an array of inter-cultural communication skills; have the ability to engage in inter-cultural encounters successfully, and display interest in knowing about world issues and events. In this study, however, global competence was looked at in terms of the level of student's self-awareness, inter-cultural communication, and global knowledge. The third dimension of global citizenship that was looked at in this study was global civic engagement. According to Morais and Ogden (2011) again, global civic engagement refers to the demonstration of action and pre-disposition of individuals and groups towards recognised local, national, and global community issues, and how they respond to such issues through actions like volunteerism, political activism, and community participation. In this study, global civic engagement of graduate students at Makerere University was looked at in terms of their involvement in civic activities, local civic activism, and in having a political voice.

### 1.1 Problem

Contextually, this study took place at Makerere University in Uganda. It was premised on the realisation that the creation of global citizens is now a widely recognised university responsibility (Boni & Calbuig, 2015; Hanson, 2010). Yet, the efforts by universities in Uganda - Makerere in particular, to internationalise seemed not to have yielded sufficient dividends. In spite of the various activities aimed at internationalisation at Makerere, some studies provide a reason for worrying about the GC of its graduates (see, e.g., IUCEA, 2014; Kanyeheyo, 2015). Implied in these findings could be that the University's desire to produce graduates who are relevant in the globalised environment is not being effectively met. This points to a question: is internationalisation at Makerere University giving students the global outlook that the University aspires to give them?

### 1.2 Study objectives

This study was generally intended to explore the effect of IoHE on the GC of graduate students at Makerere University. But specifically, the study aimed at achieving the following objectives:

1. To establish the effect of internationalisation of academic staff (IoAS) on the GC of graduate students;
2. To find out the effect of internationalisation of the curriculum (IoC) on the GC of graduate students; and
3. To ascertain the effect of internationalisation of the student community (IoSC) on the GC of graduate students at Makerere University.

## 2. Related Literature

Various scholars have already looked at the impact of IoHE on the GC of students in different contexts (see, e.g., Childress, 2010; Coryell, Spencer, and Schin, 2014; Leask, 2013; Lilley, 2013). However, each of these scholars approached the issue of GC of students arising from internationalisation from different theoretical underpinnings and contextual perspectives. The current study was underpinned by the transformative learning theory of Mezirow (1991). In a qualitative study by Lilley (2013) which explored what being and becoming a global citizen meant in the contemporary university, the finding showed that academic staff indeed acted as cosmopolitan role models since they influenced the students' understanding of global issues. The study revealed that the academic staff was able to do this by encouraging comparative learning of issues by students. Several other studies that looked at the impact of IoAS on the GC of students, for example, revealed related findings; that is, IoAS positively impacts on the GC behavior of university students. However, there were a few scholars whose study findings disagreed with this view (see, e.g., Davies, 2006; Williams & Lee, 2015; Schuerholz-Lehr, 2007).

According to Davies (2006), meanwhile, when academic staff are overwhelmed by workloads, they are constrained to effectively impact on the GC of their students as much of their time is spent away on teaching. In addition, though the academic staff may be willing to engage their learners in international issues, they may lack the necessary skills for adding any meaningful international dimension to their courses (Leask, 2011). These contentions imply that there is still disagreement amongst scholars on the roles academic staff play in enhancing the GC of the students their students. In this study, an attempt was made to explore these controversies and to verify whether the IoAS significantly affects or not the GC of graduate students at Makerere University.

The other aspect of IoHE and GC that was investigated to some extent is the internationalisation of the curriculum (IoC). According to scholars like Boni and Calbuig (2015) and Coryel et al. (2014), IoC equally has a significant positive effect on the GC of university students. In a qualitative study by Boni and Calabuig of 2015 on the behaviors of students who were exposed to an internationalised curriculum, for example, it was reported that an international curriculum offered the students a framework to interpret the world, and to reflect and think about the social injustices in it. In the same study, it was revealed that the courses offered in the internationalised curriculum made the students to develop an open-mind; and it also widened their horizons about international issues. In fact, the students reported that the curriculum helped them to be built as persons, as professionals, and as citizens who can claim their rightful places in society. In spite of the established effect of IoC on GC of students, the above studies had methodological biases towards the qualitative approaches. Besides, the majority

of the studies were largely conducted in the global north; thus, necessitating the need for such a study in the global south.

The third aspect of IoHE that was dealt with in this study was the IoSC. There is already substantial research in this area especially with respect to the effect of IoSC on the GC of students (see, e.g., Denson & Zhang, 2010; Lilley, 2013; Killick, 2012). According to Schaper and Mayson (2004), an internationalised student body benefits the students in diverse ways. First, the students benefit in terms of cultural diversity. Second, it can help in the break-down of national myopia among students; and in providing an opportunity for a multi-cultural, cross-cultural, and culturally inclusive teaching and learning environment. In yet another study by Denson and Zhang (2010) that was conducted among 5,464 graduate students in Australia, it was discovered that student interaction with diverse cultures had a significant positive effect on their appreciation of, and respect for diversity. This prompted the two researchers to recommend that HEIs should play a critical role in fostering a positive inter-cultural interaction amongst students of all levels and backgrounds. On the contrary, scholars like Green (2005), Harrison and Peacock (2013), Lunn (2008), and Montgomery (2009) in their different studies on the IoSC obtained contradictory findings to that of Denson and Zhang (2010) and Lilley (2013). Most of their studies, in fact, revealed that there were low levels of interest and participation by students in on- and off-campus international activities, which resulted into low levels of GC among university students. These contradictions and the earlier gaps highlighted in literature prompted the current researchers to generate the following research hypotheses that were verified in this study:

H<sub>1</sub>: IoAS has a significant effect on the GC of graduate students.

H<sub>2</sub>: IoC has a significant effect on the GC of graduate students.

H<sub>3</sub>: IoSC has a significant effect on the GC of graduate students.

### 3. Methodology

This study was a mixed-methods study in which the sequential explanatory research design was employed. This meant that the study began with the collection of quantitative data before the qualitative ones were later collected. This design was opted for to enable a deeper understanding of the issues under investigation. In this paper, the researchers have presented only the quantitative results of the study. In the study, data were collected from a sample of 180 graduate students drawn from the various colleges of the University using stratified random sampling technique. However, to get a representative sample of the target population, colleges were stratified according to Biglan's (1973) classifications of disciplinary fields in higher education. As a result, four college strata, namely: hard-pure, hard-applied, soft-pure, and soft-applied, were created and from which the study respondents were drawn. Data were collected with the use of a partially adapted self-administered questionnaire which was prior tested for its validity and reliability. The results of the reliability test were as follows: IoAS (12 items,  $\alpha=0.73$ ), IoC (12 items,  $\alpha=0.67$ ), IoSC (11 items,  $\alpha=0.79$ ), global social responsibility (15 items,  $\alpha=0.90$ ), global competence (12 items,  $\alpha=0.89$ ), and global civic engagement (17 items,  $\alpha=0.83$ ). This questionnaire was considered to be reliable for as Cronbach (cited in Bakkabulindi, 2011) put it, any reliability alpha coefficients above 0.5 would indicate an acceptably reliable instrument. In this case, all items on the questionnaire - except those in the background were continuous and were each scaled on a five-point Likert scale whereby: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (NS), 4 = Agree (A), and 5 = Strongly Agree (SA). This meant, therefore, that a higher score indicated higher levels of IoHE or GC, and vice-versa. The data collected by using the said questionnaire were then analysed and presented using descriptive and inferential statistics.

### 4. Findings

#### 4.1 Background Characteristics of Respondents

In this study, data were collected from a sample of 180 respondents. These were all graduate students drawn from six of the nine colleges and the School of Law of Makerere University. In terms of sex distribution, male respondents (109 or 60%) dominated in the study. This was in tandem with the enrolment data, which showed that there were more male graduate students than their female counterparts at the University – an inequality that

needs to be separately addressed. In terms of disciplinary fields, the majority of the participants were drawn from the soft-applied (59 or 32.8%) and followed by soft-pure (41 or 28.8%) disciplines. These were followed by respondents from the hard-applied (49 or 27.2%) and then hard-pure (25 or 17.2%) disciplines. This finding was also in line with the enrolment distribution of graduate students in the different colleges in the University - where more students were enrolled in the humanities and the social science programmes than in the natural sciences. Regarding the nationality of the study participants, the national students (154 or 85.6%) dominated in the sample as compared to the international ones (26 or 14.4%). This was not strange because there are more local students than their international counterparts. Finally, concerning travels abroad, the majority (62.3% or 112) of the study participants had never traveled abroad before enrolling on their current study programmes. This implied that the students' prior exposure to international issues was likely limited; and therefore, any change in their global citizenship could have been as a result of their participation on the graduate programmes and other activities of the University.

#### 4.2 Summary of Descriptive Statistics on the Dependent Variable - Global Citizenship (GC)

On the basis of Morais and Odgen's (2011) conceptual model, GC was looked at in terms of the student's global social responsibility [SR] (15 items), global competence [GCo] (12 items), and their global civic engagement [GCE] (17 items). During the study, respondents were asked to express their opinions on several items measuring GC using a five-point Likert scale ranging from 1=Strongly Disagree (SD) to 5=Strongly Agree (SA). Table 1 presents the descriptive results on SR as the first domain of GC.

Table 1. Descriptive Statistics on Social Responsibility (SR)

Dimension on SR	Items on SR	Mean	Std. Dev	Interpretation
Awareness of responsibility	It is my responsibility to be involved in global issues.	4.23	.610	Agree
	It is my responsibility to understand cultural differences	4.16	.638	Agree
	It is my responsibility to respect cultural differences	4.23	.570	Agree
	I would like to join groups that emphasize knowing people from different countries.	4.08	.716	Agree
	I am interested in learning about other cultures	4.20	.638	Agree
Global Justice	People around the world should get what they are entitled to have.	4.23	.796	Agree
	Countries that are well-off should help the less fortunate.	4.17	.810	Agree
	Basic social services should be available to everyone wherever they live.	4.43	.678	Agree
	It is never necessary to use force against others.	4.17	1.04	Agree
	No one country or group should dominate others.	4.29	.859	Agree
Altruism and Empathy	I am able to empathize with people from other countries.	4.11	.834	Agree
	It is easy to put myself in someone else's shoes	4.06	.859	Agree
	I am concerned about the rights of all people around the world.	4.29	.657	Agree
	I respect the rights of all people around the world.	4.33	.617	Agree
	The needs of the world's most fragile people are more pressing than my own.	3.92	.948	Agree

Overall mean=4.20 (Agree)

The results in Table 1 showed a favourable rating of graduate students' SR at the University with an overall mean response rate of 4.20 that corresponded to Agree on the Likert-scale used. The majority of respondents agreed with all the items measuring SR with more or less similar standard deviations. This suggested that the respondents rated 'high' their levels of SR.

Global competence (GCo) was the second dimension of GC that was looked at in this study. In Table 2, the summary of descriptive results on GCo was presented.

Table 2. Descriptive Statistics on Global Competence (GCo)

Dimension on GCo	Item on GCo	Mean	Std. Dev	Interpretation
Self-Awareness	I am confident that I can thrive in any cultural setting or country	3.90	.809	Agree
	I know how to help in solving some of the global problems.	3.93	.763	Agree
	I know several ways in which I can make a difference in the world.	3.80	.813	Agree
	I am able to get other people to care about global problems.	3.69	.899	Agree
Inter-cultural communication	I often adapt my communication style to the traditions of others.	3.93	.819	Agree
	I am able to communicate with people from different cultures.	3.81	.895	Agree
	I am able to mediate interactions between people of different cultures.	3.77	.836	Agree
	I am fluent in more than one internationally used languages.	2.91	1.183	Not sure
Global Awareness	I am informed about current issues that impact relationships between countries.	3.77	.891	Agree
	I understand how the various cultures of this world interact.	3.62	.928	Agree
	I am aware that I am connected to people in other countries.	4.00	.851	Agree
	My actions in my local environment may affect people in other countries.	4.10	.789	Agree
Overall mean=3.77 (Agree)				

The results in Table 2 showed a favourable rating of graduate students' GCo at the University with an overall mean response rate of 3.77, which also corresponded to Agree on the Likert-scale used. The majority of the respondents agreed with all - except one item (fluency in international languages) measuring GCo with more or less similar standard deviations. This also suggested that the respondents rated 'high' their levels of GCo.

The third dimension of GC that was looked at in this study was the global civic engagement (GCE) of graduate students. In Table 3, the summary of descriptive results on GCE was presented.

Table 3. Statistics on Global Civic Engagement (GCE)

Dimension on GCE	Items on GCE	Mean	Std. Dev	Interpretation
Involvement in civic activities	I would be happy to do voluntary work to help individuals abroad.	4.17	.704	Agree
	I would participate in a walk or run in support of a global cause.	4.13	.753	Agree
	I would feel comfortable to make a cash donation for a charity abroad.	4.04	.789	Agree
	I would feel comfortable getting employment with humanitarian organizations abroad.	4.30	.672	Agree
	I would feel happy to help people who are in difficulty abroad.	4.25	.661	Agree
	I would work informally with a group towards solving a global humanitarian problem.	4.21	.749	Agree
	I would write an opinion letter to a local media expressing my concerns over global issues.	3.92	.724	Agree
Political Voice	I feel confident to express my concerns about world problems in the media.	4.00	.751	Agree

	I feel confident to contact someone in government on global concerns.	3.91	.818	Agree
	I feel confident to participate in campus events that express their views about global problems.	4.04	.699	Agree
	I feel confident to display posters that promote a just world.	3.97	.810	Agree
	I would comfortably sign a petition in support of a just world.	4.02	.853	Agree
Glocal civic activism	Where possible, I always buy locally produced products.	4.04	.993	Agree
	I deliberately buy products that never exploit marginalised people.	4.15	.851	Agree
	I would boycott products that harm people anywhere in the world.	4.14	1.020	Agree
	I attend community social activities.	4.08	.880	Agree
	I discuss international issues with other people.	3.94	.940	Agree
Overall mean=4.08 (Agree)				

The results in Table 3 showed a favourable rating of graduate students' GCE at the University with an overall mean response rate of 4.08 that corresponded to Agree on the Likert-scale used. The majority of respondents agreed with all the items measuring GCE with more or less similar standard deviations. This suggested that the respondents rated 'high' their levels of GCE.

To find the overall image of how the respondents rated their views, opinions, and feelings on their GC, an average index termed GC was computed out of the three dimensions of GC that were looked at in the study; thus,  $GC = (SR+GCo+GCE)/3$ . On the basis of data presented in Tables 1 to 3, it emerged that at the 95 percent confidence level, respondents overall rated their GC to be 'high' with a corresponding mean response rate of 4.03, median of 3.97, and a standard deviation of 0.344. This implied that there was normal distribution of respondents' views or opinions on GC, which overall rated it as being high (Agree).

### 1.3 Summary of the Descriptive Statistics on the Independent Variable – IoHE

On the basis of Gao's (2011) conceptual model, IoHE was conceptualised in terms of: internationalisation of academic staff [IoAS] (12 items), internationalisation of the curriculum [IoC] (12 items), and the internationalisation of the student community [IoSC] (11 items). Again, respondents were asked to express their opinions on several items that measured IoHE using a five-point Likert scale ranging from 1=Strongly Disagree (SD) to 5=Strongly Agree (SA). The descriptive results on IoAS – the first dimension of IoHE, were presented in Table 4.

Table 4. Descriptive Statistics on Internationalisation of Academic Staff (IoAS)

Items on IoAS	Mean	Std. Dev	Interpretation
Some of my course instructors are from outside Uganda.	1.85	1.12	Disagree
My university receives visiting lecturers from outside Uganda.	3.28	1.46	Not sure
My course instructors relate course content to global contexts.	4.31	.609	Agree
Some of the reading materials are authored from outside Uganda.	4.51	.584	Agree
My course instructors engage students in work on global issues.	4.21	.627	Agree
My course instructors engage students in research on global issues.	4.11	.717	Agree
My course instructors share their foreign experiences during lectures.	4.19	.641	Agree
Some illustrations given during lectures are from outside Uganda.	4.10	.712	Agree
My course instructors respect students from all cultural backgrounds.	4.25	.813	Agree
My course instructors demonstrate respect for diversity.	4.24	.648	Agree
My course instructors encourage all students to give presentations about different countries.	4.44	.643	Agree
My course instructors invite scholars from outside Uganda to give us lectures.	4.10	.711	Agree

The results in Table 4 showed a favourable rating of graduate students' IoAS at the University with an overall mean response rate of 3.91 which also corresponded to Agree on the Likert-scale used. The majority of respondents agreed with all - except two items (some of my course instructors are from outside countries, and my University receives visiting lectures from universities abroad) measuring IoAS with more or less similar standard deviations. This also suggested that the respondents rated 'high' the level of IoAS at the University. The second dimension of IoHE that was looked at in this study was the internationalisation of the university curriculum (IoC). The summary of descriptive results on IoC was presented in Table 5.

Table 5. Descriptive statistics on internationalisation of the curriculum (IoC)

Questionnaire item on IoC	Mean	Std. Dev	Interpretation
I have studied an additional internationally used language	1.62	.909	Disagree
My University has a graduate studies language proficiency requirement.	3.83	.975	Agree
Instruction at my University is done through an internationally used language.	4.54	.673	Agree
The content covered in my study programme covers global issues.	4.40	.595	Agree
Some of the compulsory courses I take cover global issues.	4.33	.616	Agree
The elective courses I take cover global issues.	4.30	.693	Agree
I have studied a course that requires comparing world systems.	4.10	.822	Agree
I am pursuing a jointly taught degree programme.	2.10	.925	Disagree
International internship is a compulsory component of my programme.	1.92	1.01	Disagree
My study programme has quipped me with ICT skills.	4.30	.652	Agree
The courses I have covered have exposed me to knowledge about different parts of the world.	4.30	.776	Agree
The courses I have covered have exposed me to knowledge about different global issues.	4.30	.622	Agree

The results in Table 5 showed a favourable rating of graduate students' IoC at the University with an overall mean response rate of 3.66, which also corresponded to Agree on the Likert-scale used. The majority of the respondents agreed with all - except three items (I have studied an additional internationally used language during the course of my programme; I am pursuing a degree that is jointly taught with another university outside Uganda; and internship outside Uganda is a compulsory aspect of my study programme) measuring IoC with more or less similar standard deviations. This also suggested that the respondents rated 'relatively high' the level of IoC at the University. The third and last dimension of IoHE that was looked at in this study was the internationalisation of the student community (IoSC). The summary of descriptive results on IoSC was presented in Table 6.

Table 6: Descriptive Statistics on the Internationalisation of the Student Community (IoSC)

Items on IoSC	Mean	Std. Dev	Interpretation
Some students at my University are from outside Uganda.	4.70	.644	Agree
At my University, students are encouraged to do their internship from outside Uganda.	2.63	.995	Not sure
I have ever participated in an international workshop/conference.	4.40	.595	Agree
We hold regular inter-cultural festivals at my University.	3.81	.968	Agree
At my University, orientation programmes target students from different countries.	3.82	.908	Agree
At my University, students from different countries are allowed to form clubs and associations.	4.15	.656	Agree
At my University, students from different countries are encouraged to join different clubs and associations.	4.13	.638	Agree
The University provides funding for student organisations.	3.20	.857	Not sure
At my University, halls of residence are open to all students.	4.14	.742	Agree
My University has an office for coordinating cross-border student activities.	4.06	.774	Agree
My University provides opportunities for students from different countries to participate in volunteer programmes.	4.05	.690	Agree



Overall mean=3.91(Agree)

The results in Table 6 showed a favourable rating of graduate students' IoSC at the University with an overall mean response rate of 3.91, which also corresponded to Agree on the Likert-scale used. The majority of respondents agreed with all - except two items (At my University, students are encouraged to do their internship from countries outside Uganda; and the University provides funding for student organisations to sponsor cross-border activities) measuring IoSC with more or less similar standard deviations. This also suggested that the respondents rated 'high' the level of IoSC at the University.

To find the overall image of how the respondents rated their views, opinions, and feelings on the IoHE at Makerere University, an average index termed IoHE was computed out of the three dimensions of IoHE that were looked at in the study; thus,  $\text{IoHE} = (\text{IoAS} + \text{IoC} + \text{IoSC})/3$ . Based on the data provided in Tables 4 to 6, it emerged that at the 95 percent confidence level, respondents overall rated the IoHE at the University to be 'high' with a corresponding mean response rate of 3.91, median of 3.82, and a standard deviation of 0.397. This implied that there was a normal distribution of respondents' views or opinions on IoHE, which overall was rated as being high (Agree).

#### 1.4 Test of Hypotheses

The researchers set out to verify three research hypotheses, as stated in the literature review section. In-line, the following null hypotheses were derived:

H0<sub>1</sub>: IoAS has no significant effect on the GC of graduate students.

H0<sub>2</sub>: IoC has no significant effect on the GC of graduate students.

H0<sub>3</sub>: IoSC has no significant effect on the GC of graduate students.

To test these null hypotheses, the researchers used simple linear regression analysis technique where the individual effects of each aspect of IoHE on GC of graduate students were established. Before the regression analyses, the researchers generated indices to measure each of the research variables basing on the descriptive results that had earlier on been computed. Then, the index measuring the dependent variable (GC) was regressed against the different dimensions of IoHE (i.e., IoAS, IoC, & IoSC) – the independent variables. The summary of results of the regression analyses was presented in Table 7.

Table 7: Regression of GC on IoHE

Dimensions of IoHE	R <sup>2</sup>	Beta	P
Internationalisation of academic staff (IoAS)	0.056	0.236	0.001
Internationalisation of the curriculum (IoC)	0.062	0.250	0.001
Internationalisation of the student community (IoSC)	0.041	0.202	0.007

The results in Table 7 showed that: first, there was a significant relationships between each aspect of IoHE and the GC of graduate students at Makerere University (see for IoAS: B=0.236; IoC: B=0.250; IoSC: B=0.202). Second, each aspect of IoHE had a significant positive effect on the GC of graduate students (see IoAS: R<sup>2</sup>=0.056, p=0.001<0.05; IoC: R<sup>2</sup>=0.062, p=0.001<0.05; IoSC: R<sup>2</sup>=0.041, p=0.007<0.05). Therefore, all the three null hypotheses were rejected and their alternative hypotheses accepted. Literally, this meant that increased internationalisation of the academic staff, curriculum, and the student community led to better GC of graduate students and the reverse was likely true.

#### 4. Discussion

This study explored the effect of IoHE on the GC of graduate students at Makerere University. From the study, three key findings emerged. First, the study established that the IoAS significantly affects the GC of graduate students. Second, it was also found out that IoC significantly affects the GC of graduate students. Lastly, the study also found out that the IoSC as well significantly affects the GC of graduate students. The finding that IoAS significantly affects the GC of graduate students supports Mezirow's theoretical claim in the TLT that new

values, beliefs, and meanings are created or existing ones strengthened through an educational experience. This could suggest that the higher the IoAS, the more likely that their students would develop higher levels of GC and the reverse would likely be true. This finding also corroborated that of the earlier researchers (see, e.g., Coryell et al., 2014; Lilley, 2013; Simpson et al., 2014) that came up with similar findings. Based on the findings of this and other previous researches, therefore, it seems clear that for an educational institution to train students who are socially responsible, globally competent, and civically engaged globally, an internationalised academic team is vital.

Second, the finding that IoC significantly affects the GC of graduate students equally supports and validates Mezirow's theoretical stance which posits that new values, beliefs, and meanings are created or existing ones strengthened through an educational experience. This could suggest that the more internationalised a curriculum becomes, there is more likelihood of higher GC levels of the students exposed to such a curriculum. This finding also corroborated that of the earlier researchers (see, e.g., Boni & Calabuig, 2015; Hanson, 2010; Schattle, 2009) with similar arguments. Regardless of the noted Internationalisation of the curriculum directions at Makerere University, this study found out that international languages, joint teaching, and international internships, proposed by scholars such as Gao (2015) and Knight (2004; 2008) as important elements of IoC, were not manifested at Makerere University (see Table 6). This suggests that any global citizenship attribute accruing from these may not necessarily be achieved by students.

Finally, the finding that IoSC significantly affects the GC of graduate students is in consonant with Schaper and Mayson's (2004) observation that having an internationalised community of students at a university has several benefits including breaking down of national myopia and creating an opportunity for a multicultural, cross-cultural, and culturally inclusive teaching/learning environment. Again, like Killick (2012) argued, the experiences mentioned in this study, point to the potential for students to walk among others as they journey through their university lives, and in taking such steps, they are engaging in a process of becoming global citizens. This finding again resonates with other earlier researchers (see, e.g., Coryell et al., 2013; Henderst & Sperandio, 2009; Parsons, 2010) that got similar findings about the effect of IoSC on the GC of students as being significant and positive as well. In other words, the more internationalised the student community becomes, the more likely that students will be nurtured into global citizens.

## 5. Conclusions and Recommendations

In this article, the researchers explored the effect of IoHE (especially the three dimensions highlighted by Gao: IoAS, IoC, & IoSC) on the GC of graduate students. With the findings presented in this article, the researchers affirm that IoHE matters in augmenting the GC of graduate students. Indeed, the finding that IoAS significantly affects the GC of graduate students has accentuated the central role played by academic staff in enhancing GC amongst learners. Contextually, therefore, this study concluded that for the academic staff to inculcate the spirit of GC among the students they teach, integrating the international aspects of teaching and learning is critical. In fact, academic staff need not to abandon their traditional teaching styles, however, for their students to graduate as global citizens, they are encouraged to integrate international, comparative, and global perspectives in their teaching processes. This would help their learners to graduate as workers who are well knowledgeable about the world; and hence, able to practice anywhere in the world, while participating in world developments.

Second, the finding that IoC significantly affects the GC of graduate students has stressed the importance of the curriculum as an essential vehicle for the development of GC amongst graduate students. This study, therefore, concluded that integrating international aspects into the curriculum is essential if universities have to produce graduates who have the ability to locate themselves in the world by being responsible for their actions in the local and global community, having an awareness of world developments that affect humanity, and by participating in both local and global civic activities that make the world a better place for all humanity. It was thus recommended that curriculum developers need to ensure that students do not only learn about their local environments, but the globalized world as well.

Finally, the finding that IoSC significantly affects the GC of graduate students has emphasised the potential of an internationalised student community in the development of GC amongst learners. In conclusion, this study's finding suggests that a student community with students of different cultural backgrounds, with programmes and activities that enhance the interaction of these students, is essential in any university's attempt to train graduates who promote an ethos of social responsibility, an understanding of world issues and inter-connectedness, and participating locally and globally in activities that affect humanity. Therefore, it is important to establish inter-cultural communities within the university community of students composed of students from different countries and cultural communities. It is, however, not enough to have a multi-cultural community, Makerere and other universities should encourage programmes that enable domestic and international students to fully interact and integrate through a variety of opportunities such as student organisations and inter-cultural activities. These would enable universities to consolidate the idea of producing global citizens.

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# The Issue of Ineffective Teaching in Cameroon Public Secondary Schools

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## Abstract

Effective teaching is one of the key elements in the teaching-learning transaction that has caught the attention of many stakeholders in education. Although much has been said and written on this issue, it is still obvious that teaching is not really effective in some schools especially when compared to students performances in various class works and end of course examinations. Based on this, the paper examines some factors that contribute to ineffective teaching in some selected secondary schools in Bamenda municipality in the North West region of Cameroon. A systematic sampling technique was used to select a sample of 120 teachers from Government Bilingual High schools Bamenda, Bayelle, and Atiela. From the observation and the questionnaire administered, the findings revealed that majority of the teachers hardly carried out intensive research and that hindered effective mastering of the content knowledge of the lessons taught. Some of them used methods that were more of teacher-centered, majority of the teachers scarcely prepared their lessons before the actual teaching and some did not consider the differences in learners learning styles during the teaching-learning transaction. Verbal communication in the classroom was more of teacher-centered. Most of the teachers used basically traditional materials neglecting the use of advanced media and community resources while only 30% of the teachers made an effort to create awareness on the purpose and importance of the knowledge learners learned. All these rendered the teaching-learning transaction less effective. In order to improve on this situation, teachers should carry out intensive research, effectively prepare their lessons, vary and use the constructivist approaches of teaching so as to meet up with the demands of Competence-Based Learning and complement the use of traditional media with advanced and community resources.

**Keywords:** Effective, Teaching, Learning, Transaction

## 1. Introduction

The issue of effective teaching has been a problem in the educational system, especially in the Cameroon context. Falling standards of education are often associated with the way teaching is carried out despite the fact that most teachers in public schools are trained. In most cases, teachers are concerned with what they teach and not on how they can teach in order to enhance the teaching-learning transaction. If a teacher teaches and there is no effective learning, it means there was no effective teaching. Therefore this paper is aimed at finding out some

of the factors that contribute to ineffective teaching-learning in some selected schools in Bamenda municipality of the North West Region in Cameroon despite the training given to teachers in these schools.

## 2. Background on Teaching

Teaching has been variedly defined by different authors, and the definitions transform as time goes by. From a lay perspective, it is simply transferring information to learners. Farrant (1982:168) defines it as the process that facilitates learning. For Kneiler (1972), teaching is an intentional activity that aims to bring about learning. To Nsamenang (2004), teaching is the facilitation of learning, a definition, perhaps inspired by his afri-centric approach to educational psychology as the teaching-learning transaction. From these definitions, it is clear that teaching goes with learning, and therefore, effective teaching is a transactional process between the teachers and the learners that brings about effective learning. It is difficult to establish when teaching actually began, especially when we know that teaching started informally in homes long before the establishment of the first private, mission, or public schools. In ancient times, the art of teaching was the preserve of the literate in society who in most cases were priests and prophets. The history of teaching during the medieval period shows that knowledge was a privilege given reserved only for the children of the wealthy and noble (Highet, 1964). The teaching objectives were mostly centered on transferring skills that could enable the children in taking up future roles in leadership and business. The scribes were revered for this specialized role of imparting knowledge and occupied an envious position in the strata of society. They were people endowed more with wisdom than with knowledge of moving society forward. Teaching in the ancient period was everything but for academic learning.

In the Middle Ages where the authority of the church and Pope stood supreme, teaching was entrusted in the hands of monks whose teaching interest rested on, although not limited to, matters of faith and morality (Highet, 1964). Indoctrination was the traditional approach of imparting knowledge. Learners of the time were more or less passive recipients of knowledge with little critical skills. It was all about faith in the Men of God who owned the monopoly of knowledge. According to Tchombe (2019), the teaching methods used during the middle ages were more of drill and repetition, which encouraged more of rote learning. This shows that learners were not encouraged to be creative or to discover more knowledge on their own. This, therefore, made the teaching-learning process less effective. During the Renaissance and Reformation periods in early modern Europe, the omnipotent teaching philosophy of the ancient and medieval periods came under sharp criticism. Scholars principled by the spirit of enquiry and age of reasoning that accompanied the Renaissance and Reformation deconstructed the view that "the teacher knew everything and the learners were *tabula rasas*." This brought a new relationship in the teaching-learning transaction where the teacher even though remaining at the centre of teaching, realized that the learners had something to contribute. Some changes in the 19<sup>th</sup> century determined many elements that re-interrogated the essence of teaching.

Teaching in most parts of the 19<sup>th</sup> and the early part of the 20<sup>th</sup> century was defined in terms of imparting knowledge. Standards for teaching made an emphasis to the conduct of the lives of teachers over their professional abilities. For instance, as Arends (2007) states that in common or public schools in the United States between 1825 and 1850, the purposes of schools were few and the teachers' role rather simple. Basic literacy and numeracy were the primary goals of 19<sup>th</sup> century with curriculum dominated by what later came to be called the THREE 'Rs,' Reading, writing and Arithmetic; a curriculum that was also imposed by missionaries in Africa (Cameroon) during the colonial period. (Gwanfogbe, 2006). Standards governing teaching was almost non-existent, and emphasis was on rules and regulations governing teachers' personal lives and moral conduct. For example, a teaching contract included engagements like 'I promise not to fall in love, to become engaged or secretly married.' This is clear testimony that 19<sup>th</sup> c. Concern for teaching was tilted towards moral character and conduct instead of pedagogic abilities. In principle, it was heavily teacher-centered. The interest of the learners was hardly taken into consideration. This lapse was recognized by William James as cited in (Lesgold and Glaser, 1989), an educational psychologist who carried out extensive classroom research tailored to fit the needs (conditions) of the learners and not the condition that the teacher assumed the learner should be in. He supported the use of discussion, projects and activities, laboratory experiments, writing, drawing, and the use of concrete

materials in teaching. This is a classical example of a learner-centered design, which unfortunately took time to be embraced as an effective teaching culture.

So far, the presentation of teaching in historical perspectives has raised the vision, mission, and method of teaching across time. Understandably, there was a need to organize teaching to meet desired targets or to build learners holistically, hence the development of pedagogy, the art, and science of teaching. According to Arends (2007), teaching has a scientific basis since its practices are based on research and scientific evidence; it is also an art based on teachers' experiences and wisdom of practice. In order to enhance learning, teaching must be effective, although teachers are considered as facilitators, they play a key role in enhancing learning. The falling standards of education in Cameroon are most often related to the teaching process. Although more than 70% of teachers in public schools are trained, the performances of learners in some of these schools are below standards. Therefore it becomes crucial to examine the factors affecting the teaching-learning process in some of these schools. In line with this objective, the research question that guided this research was: What are the various factors that inhibit effective teaching in some public secondary schools in Bamenda?

### 3. Methodology

This research was designed to assess some of the factors that inhibit effective teaching in secondary schools. The research design used in this study was a cross-sectional survey as data was collected from a cross-section of teachers in Bamenda two and three municipalities in the North West Region of Cameroon. A purposive sampling technique was used to select three public schools, which were Government Bilingual High school Bamenda, Government secondary school Nkwen, and Government High School Atiela. These schools were purposely selected because majority if not all the teachers were trained, but students performances were still not encouraging therefore as a teacher trainer I was curious to find out the factors affecting teaching-learning process in those schools. A systematic sampling technique was used to select a sample of 120 teachers from the three selected schools, specifically those teaching in the first cycle (forms 1-5).

A questionnaire and an observation guide were used to collect the data from the teachers. The questionnaire was designed for teachers, and it consisted of two sections. Section A was made up of the demographic data of the respondents which had an implication on the findings especially the item on the longevity of service and section B was made up of the factors that hinder effective teaching. The questionnaire had both open and closed-ended items. The copies of the questionnaires were administered to teachers in their various school campuses. Most of them were administered in the staff rooms while a few of them in their respective classrooms. Generally, the respondents used at most 45 minutes to fill the copies of the questionnaire. The observation guide was designed purposely to help the researcher observe some teachers during the actual teaching. It was based on the use of teaching methods and materials, consideration of individual differences during teaching and verbal communication between the teachers and learners. It should be noted that observation was meant to complement the data collected from teachers. The data were analyzed using descriptive statistics, specifically Frequencies, percentages, and thematic analysis.

As far as the ethical issues were concerned, consent was sought from the school administrators and teachers who were implicated in the study. The nature and purpose of the research were explained to them, and fortunately, all the respondents gave their consent to participate in the study. I assured the respondents of the principle of confidentiality, and that was why there was no space provided on the questionnaire for their names. I technically avoided any situation that could warrant them to mention their names, especially based on the fact that the research was carried out during the period of the socio-political crisis in Cameroon.

### 4. Results

After analyzing the data collected from the teachers, it was realized that some of the factors that inhibit effective teaching in G B H S Bamenda, GBHS Bayelle, and GBHS Atiela. Were related to; insufficient research, individual differences especially the different learning styles of learners, lesson plan, instructional methods,

instructional materials, the purpose of knowledge acquired in each subject by learners and verbal communication which was more of teacher-centered. These factors are further presented in details.

#### 4.1 Research

The results on Table 1 shows that out of the 120 teachers who participated in the study, a minority (45%) of them affirmed to the fact that they carried out intensive research on at least 90% of the topics they had to teach. Some of the teachers emphasized that the fact that they had been in the teaching profession for a long time did not imply that they should not carry out research on what they had to teach. Some of them said they always wanted to update their knowledge in their subject areas and others said they read intensively and extensively to avoid embarrassments from the "intelligent" and inquisitive students during the teaching-learning process. It was realized that majority (52.5%) of them only flashed through the lessons on the prescribed textbooks before teaching. A few (3%) stated that they did not carry out any research before the actual teaching because they had been in the teaching field for a long time and therefore they had mastered the content of their subject area to the extent that they did not need to do any research before teaching effectively. According to some of the teachers, they did not carry out any intensive research because of the scarcity of textbooks in some disciplines. At times, some of the books found in the school libraries were outdated.

Table 1: Frequency distribution of responses in relation to research

SN	ITEMS	YES		NO	
		FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
1	Research				
A	Carry out intensive and extensive research on each topic before teaching	54	45%	66	55%
B	Flash through some related materials before teaching	63	52.5%	57	47.5%
C	Teach without any further research	3	3%	117	97%

#### 4.2 Lesson Preparation

Apart from insufficient research on the content knowledge, another challenge faced by most teachers was to plan their lessons effectively. From the data collected, it was realized that very few teachers (30%) in the field actually prepared their lessons before the actual teaching while 70% did not see any reason to prepare their lessons before going to class. See table two. According to some of the respondents who prepared their lessons, lesson planning is a very important tool for effective teaching because it helped them to prepare beforehand the learning activities, methods and instructional materials needed for the lesson. Some of the teachers who did not plan their lessons said they had been in the field for more than ten years and they had mastered the teaching-learning process, therefore they did not see any need planning for a lesson before the actual teaching in the classroom. It was observed that most of these teachers who did not plan their lessons were not really presenting their lessons in a sequential manner, thereby making learning difficult for the learners. This was noticed from the type of questions asked by the learners. In the course of teaching, some of these unprepared lessons were very sketchy and lacked illustrative materials. During the observation process, I realized that some of the teachers who did not plan their lessons before the teaching dangled in class while others suffered from slowdowns. Some of these teachers hushed students down when they asked challenging questions, while others considered the questions as take-home assignments. It was also realized that some of the teachers who did not prepare their lessons had problems with time management. Some had it difficult to exhaust the time allocated for the subject while others encroached into other periods.



### 4.3 Individual learning styles

As far as the issue of learning styles were concerned, The results on table 2 shows that 70 % of teachers in the selected schools were aware of the fact that learners have different learning styles that need to be considered for the teaching-learning transaction to be effective but they often neglected this in the course of teaching because most of the classes were overcrowded, making it difficult for teachers to determine the different learning styles of each learner. The results on table 2 show that only 40% of teachers considered individual learning styles during the teaching-learning process. Therefore, the teaching strategies and learning activities used by most teachers hardly favoured all the learners. According to some of these teachers, if there were to consider the learning styles of every learner they would not be able to complete the scheme they were assigned to before the end of the academic the year. This still confirms the fact that teachers are most often concerned with what they teach and not how it should be taught for learners to learn effectively.

### 4.4 Instructional methods

On the part of the use of instructional methods, the results on table 2 indicate that most (54%) of the teachers varied their methods of teaching depending on the lessons they taught but neglected the issue of learners' needs. It was discovered that only 30% of teachers assigned students to carry out research on certain themes and present in class. This method, according to some teachers, was time-consuming. It was also realized that 55% of them used the discussion method when teaching some lessons. According to some (33.3%) of the respondents, since the ratio of the teachers and students in most classrooms was 1:70, they tend to use direct methods like lecture-illustration, so as to complete their scheme of work for the given class. This might have hindered the learning process of some learners.

Table 2: Frequency distribution of responses in relation to individual differences, lesson plan, and instructional methods

SN	ITEMS	YES		NO	
		FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
2	Individual Differences				
A	Aware of individual learning	84	70%	36	30%
B	Considers individual learning styles	48	40%	72	80%
3	Plans each lesson before teaching	36	30%	84	70%
4	Use diverse instructional methods during teaching and learning	64.8	54%	55.2	46%
A	Interactive methods	66	55%	54	45%
B	Indirect methods	36	30%	84	70%
C	Direct methods	40	33.3%	80	66.7%

### 4.5 Instructional Materials

Also, the findings of this research proved that 80% of teachers in the selected schools used instructional materials in teaching, but the problem was that they used mostly traditional media like the board, charts, textbooks and workbooks to the detriment of advanced media and community resources which could make teaching-learning more interesting and effective. Only about 25% of teachers used advanced media, specifically the computer, to carry out research. See table 3. It was realized from both the questionnaire and observation that no teacher used the projector in teaching in these schools. According to most of them, they were not using advanced media because some of them were very expensive to purchase, and some of them were not trained on how to use these materials. Some teachers proposed that the school authorities should provide them with

materials like the projectors and computers and also organize workshops to train some of them on how to use these materials.

Table 3: Frequency distribution of responses in relation to Instructional materials and purpose of knowledge in each subject

SN	ITEMS	YES		NO	
		FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
5	Use diverse instructional materials during the teaching-learning process	72	80%	48	20%
A	Advanced media	30	25%	90	75%
B	Traditional media	90	75%	30	25%
6	Create awareness on students on the purpose of knowledge they acquire in each subject	36	30%	84	70%

#### 4.6 Purpose of the content taught in each subject

Also, from the data gotten from some of the respondents, it was realized that only 30% of them made the learners to be away of the importance of the information or knowledge they were being taught while 70% only focused on the transmission of the information. According to some of the teachers who focused only on the transmission of the knowledge, most of them did that to have good results at the end of course examinations like the General Certificate of Education (GCE) Ordinary level. It was realized that teaching was more of examination-oriented.

#### 4.7 Verbal communication

It was equally found out that one of the most important aspects that affected the effective teaching-learning process was the use of verbal communication. From my observation, it was realized that more than 60% of the verbal communication in the classroom was done by teachers. One of the reasons that made teachers to dominate in the lessons which I observed was because they mostly used the objectivist approach of teaching which entails the telling/lecture method of teacher which was more of teacher-centered approach. Also, the teachers and students ratio of 1:70 made some of these teachers to communicate mostly with the learners seated on the front benches to the detriment of those seated behind. This problem was also associated with the arrangement of the classroom. The issue of arranging the benches in to columns and the teacher's table position in front was not the best, and it hindered effective communication as the teachers mostly concentrated on those in front. Students mostly communicated through feedback (responding to teachers questions)

### 5. Discussion of Findings

The idea of effective teaching is meaningless if it does not lead to effective learning; therefore one of the most important aspects to be considered in order to render teaching effectively is mastery of the subject matter of the discipline being taught which can be achieved mostly through intensive research. From the findings of this study, it was realized that majority of teachers did not carry out intensive research or really read out of the prescribed texts and that is why they found it difficult to answer some questions or to clarify the doubts of some of their learners. In order to have command of the subject matter to be taught, the teacher must carry out extensive reading before teaching. Although most teachers complained of inadequate textbooks in the school libraries, some of the blame was on them because to become effective teachers, and they should not rely solely on the school library to prepare for a lesson. Instead of attributing blames to inadequate textbooks, teachers should cultivate the habits of consulting other reliable sources of information like the internet, which can serve as online libraries, periodicals like newspapers, magazines, and journals. This, therefore, means that for teachers

to become effective, it is good for them to familiarize themselves with syllabuses, read the prescribed textbooks and supplement them with other sources of information weeks ahead of the lessons (Awoniyi, 1980). Take note that there are some students who read extensively and even come to class with the aim of challenging their teachers. Therefore, in order to overcome this challenge and to render the teaching-learning transaction effective, teachers are obliged to read and master their course content if they really have to assume the role of a facilitator. This can be supported with the views of Nsamenang (2004) who emphasizes that one of the core tasks of an effective teacher is to have knowledge of the content of what is to be taught which can only be achieved through intensive research. It is high time teachers started cultivating the habit of diversifying their sources of information in order to master and defend the content of what they teach at any time.

Apart from having a mastering of the content through intensive research, another challenge faced by most teachers is to plan their lessons effectively. It was realized that very few teachers (30%) in the field plan their lessons before the actual teaching. Some of these teachers used the same lesson notes for several years without any revision despite the introduction of the New Pedagogic Approach (NPA) and subsequently the Competence-Based Approach (CBA) in the Cameroon educational system. Their main focus was to complete the syllabus and not whether learning has really taken place. Although most teachers in Bamenda municipality were not interested in planning their lessons, a few numbers of them as earlier mentioned planned their lessons before the actual teaching especially those who graduated from the teachers training colleges a few years back. Lesson planning is one of the key elements of effective teaching because it helped teachers to prepare beforehand the activities, methods, and instructional materials needed for the lesson. According to Anja (2006), lesson planning is very essential prior to any teaching-learning process because it helps the teachers to understand exactly what and how to teach and what and how learners will learn in the process. When teachers prepare their lessons effectively before the actual teaching, they are able to choose the appropriate methods, material, and the activities to initiate based on the needs of the learners. A well-prepared lesson can also help another teacher to pick up the lesson plan and successfully teach the class without further instructions. It should be noted that the lesson plan helps the teacher to determine and evaluate the learning objectives of a particular lesson which enhances effective teaching. According to Sellers, Roberts, Giovanetto, Friedrich and Hammargren, (2007), objectives are concise, explicit statements that describe what exactly you expect students to learn and the skills you hope they will acquire during the lesson. Therefore when objectives are well stated, they will help the teacher to select appropriate instructional methods, create learning activities, and choose appropriate evaluation or assessment methods. Unfortunately, lesson planning is probably one of the most neglected tools among teachers in most of our schools. As teachers of the 21<sup>st</sup> century, they should take upon themselves as a challenge to always prepare their lessons before the actual teaching. A good lesson plan will enable any teacher to be able to move smoothly from one activity to another, thereby avoiding dangling, truncation, flip-flop, and slowdowns; this will definitely ensure effective teaching and learning.

Also, another factor that enhances the teaching-learning transaction effective is the consideration of various learning styles of the individual learners. Although majority of teachers are aware of the fact that learners have different learning styles that need to be considered for the teaching-learning transaction to be effective, they often neglect this in the course of teaching because most of the classes are overcrowded, making it difficult for teachers to determine the different learning styles of each learner and their individual needs. In order to make effective teaching, teachers should try to employ teaching strategies that will be appropriate for the three types of learning styles; visual, auditory, and kinesthetic/tactile. The visual learners learn by seeing; they often prefer to see things written in text or projected materials, and they find maps, graphs, charts, and other visual learning tools to be extremely effective. Auditory learners' best learn by hearing; they prefer lectures and discussions. Their learning process can be facilitated with the used of audio tapes and radio programmes. On the other hand, kinesthetic/tactile learners learn by doing, moving, and touching. Tactile/Kinesthetic persons learn best through hands-on approaches or actively exploring the physical world around them. In order to improve on their learning, teachers should consider use activities like debates, simulations or use the manipulative media like computers. If this is done effectively, it can also enhance inclusive education in our schools. Moore (1992) supports the view that learners have different ways of learning, and teachers have to consider these learning styles in order to enhance effective teaching. This means teachers should employ teaching methods and materials that are commensurate with these learning styles. Therefore when teachers are trained and sent to the field, they should

avoid being an auditory nor a visual teacher but a dynamic teacher who will be able to facilitate learning in all the learners despite their individual differences. Teachers should use a variety of methods, materials, and examples in each lesson because regardless of learners best mode of learning, it will help every learner at the same time (Rosenshine & Furst, 1973).

It is obvious that in the course of discussing about the learning style, we have highlighted some ideas on teaching methods. This is one of the most important aspects as far as teaching effectiveness is concerned. Once in the classroom, the teacher must be able to apply a number of different methods of teaching to reach students with different learning styles. In order to encourage critical thinking and real-life application, students must be pushed to think outside the box. This means teachers need to be able to create an environment for this to occur. Most (54%) of the teachers in some secondary schools in Bamenda municipality stated that they vary their methods of teaching depending on the lesson they were teaching but neglected the issue of learners need. Although there is no best method of teaching, in order to teach effectively and enhance effective learning, teachers should vary their teaching methods. There are many methods of teaching, as there are lessons and learning differences and outcome. The methods used to teach any lesson will depend largely on the teaching tradition that the teacher has. If he is an objectivist, ie, teaching following the factory model of teaching, he will like to standardize and pass on information to learners in the form of known truths. According to Arends (2007), knowledge of an objectivist teacher is somewhat constant and unchanging. Teachers of this tradition are individuals who have acquired a chunk of 'important' knowledge, and their role is to transmit the knowledge in the form of facts, concepts, and principles to students. Learning by this indication is a passive process where rectangular rooms, fixed seating, chalkboards, and reading stands at the front of the classroom are designed for the mono-lineal transmission of knowledge from teachers as the students sit quietly like tabula rasa listening and taking down notes. Arends (2007,) describes it as traditional 19<sup>th</sup> c teaching, but this culture spread back to the history of teaching from the ancient times. Today such a teaching tradition has won the trademark; teacher-centered education. The greatest weakness of this approach is that, the method encourages a passive form of learning with very low student involvement. Secondly, the objectivist approach is mostly a one-way communicational channel where little attention is given to individual learning differences and very unsuitable for learners in the lower rungs of education. This is not really the best method of teaching, especially in this twenty-first century, but teachers could use this objectivist approach to teach in presenting background information when introducing a lesson presentation or unit of reference.

An alternative to the objectivist teaching approach and one that has gained respectability in the educational circles today is the constructivist teaching approach. Rather than viewing knowledge as fully known, fixed and transmittable, the constructivist perspective holds that knowledge is somewhat personal and meaning is constructed by the learner through experience (Brooks, J. and Brooks, M. 1993). Learning in this view is a social and cultural activity in which learners construct meaning that is influenced by the interaction of prior knowledge and new learning events. The constructivist teaching tradition calls for active learner participation, which falls very close to the Competency-Based Approach, which is learner-centered. This view agrees with Nsamenang's (2004), adoption of the expression, the teaching-learning transaction for the exchange that a teacher establishes with the learners. To him, the teaching-learning process should be evident in a three -parts structure. On the one side, the teacher, on the other, the content and the third, the learner. In this process, the teacher and the learner negotiate strategies to construct meaning out of a set content. Metaphorically expressed, is a business transaction where the teacher is the seller, the content the commodity, and the learner the buyer. The teacher proposes a selling price which runs through bargain (from the learners or buyers). The amount that the commodity is finally disposed of is not only determined by the marketing strategies of the seller (the teacher) but the bargaining skills of the buyers (learners). This makes all the stakeholders of the business transaction active participants of the deal. Examples of teaching methods that fall under this approach are the discussion method, project method, laboratory method, and activity. These methods give learners the opportunity to explore their learning environment and to interact with their mates and the teacher. The use of these methods gives the teacher and the students the opportunity to use practical and real-life examples which help to connect theory with practical applications for more effective learning and teaching. The constructivist approach of teaching can also be supported by Piaget's (1978) idea of constructivism. He believed that children construct new knowledge from their experiences and therefore, the best method to teach them should be the discovery method where the

learners can learn from their actions. One of the best methods of teaching as a transactional process between the teacher and learner is the discussion method which according to Tchombe (2019) help learners to develop problem-solving skills, share experiences and master the subject matter. In the teaching-learning transaction, there must be a relationship between teaching and learning. In this process, teachers do not teach for themselves but stand as facilitators. Teaching is much more than the efficient delivery of thoroughly prepared lessons. From all these, it shows that for teaching to be effective teachers should employ a combination of teaching methods especially those that are learner-centered because some learners learn by doing, others by listening and some need group interaction ( Tchombe, 2011).

Also, in order to avoid ineffective teaching, there is a need for effective use of instructional materials. From the findings of this research, it was proven that majority of teachers in some public schools in Bamenda municipality used some instructional materials in teaching although limited to the traditional materials like the board, charts, textbooks, and workbooks. The problem with these instructional materials used by these teachers was that they favored only the visual learners with little or no impact on the auditory and kinesthetic learners. Teachers should take note that for them to teach effectively, they should always prepare and use instructional media in every lesson they teach. There are different types of instructional materials that can be used in the teaching-learning process which can be classified as follows -Traditional media: models, print (textbooks, Journals, newspapers, magazine, flashcard etc.), charts, pictures, board etc; Community resources: resource places, resource persons, things and events; Advanced media: These are electromechanical devices that if properly used will improve on the teaching-learning process (Tambo, 2003). Some of these media are computers, televisions, radio, telephones, projectors, microphones, etc. Twenty-first-century teachers should complement the use of traditional materials with advanced instructional media. They should also encourage learners to use these tools, especially internet services, to carry out research and to facilitate communication between the teachers and students or to disseminate relevant information among their classmates. If this is effectively done the teaching-learning transaction will improve. The best way to use some of these resources (especially resource places and things) is through field trip which is commonly referred to as excursion. According to Clark and Starr (1967), the best resource the teacher has is the community. The community is both a source of subject matter and a source of instructional materials, therefore, it is like a teaching laboratory. Teachers can use the community to teach any subject.

Most often the emphasis of teaching is on the transmission of pedagogic information, and scanty attention is usually given to the purpose of the pedagogic information, this calls for the question of the utility of knowledge in the teaching-learning transaction. From the data gotten from some of the teachers in Bamenda municipality, it was realized that only 30% of them made the learners to be away of the importance of the information or knowledge they were being taught while most of them focused on the transmission of the information. It is very obvious that if a student does not know the purpose of the information, she learns, it will also be difficult to use that knowledge. Therefore for teaching to be effective teachers should ensure always to give the purpose of whatever they teach so that the learners can also be able to use the knowledge effectively. If students are aware of the purpose of what they learn, transfer of knowledge will be easier.

Apart from instructional materials and other aspects already mentioned, verbal communication is also very vital in enhancing the teaching-learning transaction. From the findings of this research, it was realized that verbal communication in the classroom was dominated by teachers. This affected the learning process because most students were very passive in class. One of the reasons for this was because most of these classes were overcrowded. To increase the level of pupils' participation in class, the ratio of teachers and learners should be reduced or maybe because of limited infrastructures two teachers can be assigned to teach a subject in one class. The arrangement of the classroom should be changed from the typical columns, and the teachers table in front of a round table manner so that the teacher and the learners can easily get access to each other. Although the findings revealed that the teachers dominated the communication process during the teaching-learning transaction, the students also participated in one way or the other. They communicated mostly in response to questions from their teachers through, in some of the classes, they initiated the communication in terms of asking questions for clarification, taking permission and also contributed new ideas during some lessons especially when the lessons were interesting. Despite the fact that students were involved in the communication process,

the fact that the teachers had the highest percentage (67) showed that teaching in some of these schools is still more of teacher-centered as it used to be in the 19<sup>th</sup> and 20<sup>th</sup> centuries. Teaching is not just the matter of teachers talking and students listening, for teaching to be effective it must involve interactive communication that is skillfully directed. Teachers should always make sure that students' freedom to respond and initiate communication in class is maximized and this will make the teaching-learning transaction more effective. One of the ways that teachers should use in checking this communication process in the classroom is Flander's Interaction Analysis. According to Moore (2001), Flander's Interaction Analysis system helps teachers and other school authorities to view typical patterns of verbal communication in the classroom.

## 6. Conclusion

This paper has enlightened teachers on some of the factors that rendered the teaching process ineffective in some schools in Bamenda municipality. From the findings it was realized that most teachers overlooked salient issues like a lesson plan, the use of instructional media (specifically advanced media), individual learning styles, verbal communication, and the purpose of the knowledge taught in each subject during the teaching-learning process, and these rendered their teaching and students' learning less effective. Some of these teachers believed that since they had been in service for a long time, they did not need to dwell on some of these aspects, especially lesson planning, instructional materials, and teaching methods. Some of them had remained with the old tradition of 19<sup>th</sup>-century teaching, which was more of teacher-centered. All that some teachers were interested in was to complete the scheme of work without considering how much learning has taken place. According to some teachers, they consider their long experiences in the field to mean that they are effective teachers, forgetting the fact that the world is fast-changing and they need to upgrade their teaching through research, lesson planning and effective use of instructional technologies. The century of great teachers who arrogated to themselves the monopoly of knowledge and considered learners' in John Lock's tabula rasa viewpoint can only be remembered in historical terms. As experts and professionals, teachers are expected to use best practices to help students learn essential skills and attitudes. Professional skills are no longer judged by vague global criteria such as 'acts in a professional manner,' has a good rapport," dresses appropriately." (Arends 2007). It should be more of understanding the context of learning realities, identifying appropriate teaching methods and orientating learning outcomes to meet the challenges of the twenty-first century

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# Achieving Assessment Results: Distance Education Students of University of Education, Winneba Use of Test Taking-Skills to Solve In-Built Activities in Counselling From Self-Instructional Course Manual

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## Abstract

Adopting appropriate test-taking skills is crucial to test performance. The study assesses the use of test-taking skills among distance education (DE) students of University of Education, Winneba (UEW) in solving in-built activities on counselling in self-instructional course manual. Adopting the ex-post facto design and quantitative approach, the study used 18 participants selected through convenience sampling technique. Two instruments-test-taking questionnaires to measure the test-taking skills of participants and in-built activities in DE modules-were used to measure students' academic performance. From the analysis, DE students all adopted test-taking skills, and it was established that there was a significant relationship between students test-taking skills and their academic performance. It is concluded that test-taking skills were necessary to be used to solve in-built activities on counseling. It is recommended that the model writers need to suggest some test-taking skills which need to be used for solving in-built activities in the DE modules, especially in counseling.

**Keywords:** Test-Taking Skills, In-Built Activities, Distance Education Students, Counselling, Self-Instructional Modules, Distance Education Modules

## Introduction

When good academic performance is not attained, the individual and other family members experience feelings of anxiety concerning the individual's academic world. It is expedient to state here that the need to improve academic performance is one of the basic objectives of educating students. In every school setting, academic performance is what each student strives to achieve, and the attainment of good performance can only be enhanced through good study habits that include test-taking behaviors. Several studies (Akinboye, 1980; Adetola 1988; Pinda, 2000) have established that students' academic performance is highly influenced by their study habits/test-taking skills.

Test-taking skills among students in school in relation to their assessment have been continually researched into. Test-taking skills depend on the type of test to take. Owusu-Mensah, Torto, and Amoah (2019) argue that within



the distance education environment, different strategies are adopted by different students in attempting the in-built activities in their course models. Further, it is believed that activities support DE students to learn effectively, even though some of the activities are very challenging.

Exploring test-taking skills is important because, its popularity increased a hundred fold as more advanced technology and communication mediums became available in the late twentieth century. Today, enrollment in distance education programs at every educational level is commonplace, and varied assessment models have been developed over the years to support DE students. Hence, different test-taking skills have evolved.

Studies have expanded the scope of research on test-taking skills in many subject areas in relation to how these influence the performances of learners. Research has established that students' academic performance is the product of an interplay of factors like good and effective study habits and good test-taking skills, good teachers, and congenial school and home environment (Onocha & Okpala, 1985; Soyibo, 1986; Odebumni, 1988; Ajayi, 1988; Owusu et al., 2019). For example, Owusu-Mensah (2006) in a study to find out how DE students were assessed, found out that in assessment and for that matter examinations, DE students adopted varied test-taking strategies and there was a correlation between the strategies they adopted and their learning outcomes.

Within the UEW DE programme, weekends activities are structured in such a way that lecturers from the University of Education, Winneba, visit the students on venues situated outside the university's compound. Apart from the counseling course, all the other courses are taught by the university lecturers. The practicum part of the counseling course is handled by lecturers, however, different lecturers are identified in the sister universities where the programme is held to support with tutorials. The counseling course module has 25 in-built activities, and because the lecturer facilitating the programme is not one of the lecturers in the University of Education Winneba, rather outside the university, the study focused on their test-taking skills towards the solving of the in-built activities especially those focusing on developing counseling skills in counseling sessions.

### **Statement of the Problem**

It is believed that when students in the school setting study hard, their grades improve. In promoting academic performance with the DE students, Lockwood (1992) believes that activities in self-instructional modules are meant to enhance their learning as well as supporting them understand what they are supposed to learn in the materials. However, strategies that lend them to solve the activities most of the time are not catalogued in the self-instructional modules as found in the Ghanaian context. There is the need to find out what test-taking skills support the students use to solve the in-built activities in their manuals focusing on developing requisite counselling skills, especially on communication process, listening and giving feedback, developing listening skills for counselling, developing responding: continuation response and questioning, developing skills in feedback: paraphrasing reflection of feelings; confronting, developing skills in feedback focusing and summarizing.

University of Houston Clear Lake (UHCL) Counselling services posit that problems related to students' test-taking skills are associated with students' response to try to find out what the activity covers, feel confident that one is prepared for the activities, imagine possible answers to the activities, take time to understand the activities, follow directions carefully, have good night rest, calmly recall what one knows about the activities and understand the structure of different types of activities and be able to prepare towards solving the activities with colleagues ([www.uhcl.edu/counsellingservices](http://www.uhcl.edu/counsellingservices)). However, in the Ghanaian context and especially the study focus, varied reasons have been raised concerning the test-taking skills used by the DE students to solve the in-built self-instructional activities in their course modules. Reports indicated that, DE students' performance in two centres are not encouraging. Reasons suggest that the facilitators may not have in-depth skills in supporting the DE students or the students do not use the requisite skills in solving the activities.

These concerns had become necessary because, since 1996, when the programme started, there has not been any study to find out the strategies DE students adopt to support them solve in-built activities in the self-instructional

modules. Again, a survey of literature on distance education students' use of activities in self-instructional modules has revealed a paucity of studies on this topic (Tait, 2004; Owusu et al, 2019). Besides, the few studies identified in the literature, search does not talk about the testing skills used in Ghana, and the few that talk about some test-taking skills are outside Ghana. This study, therefore, sought to fill in the knowledge gap.

### **Purpose of the study**

The purpose of this study was to investigate how test-taking skills support students to solve in-built activities in counseling in the self-instructional course manual for DE students of the University of Education, Winneba (UEW).

### **Objectives of the study**

Specific objectives of the study were to:

1. Assess the use of test-taking skills by DE students of UEW to support solving in-built activities in counseling in the self-instructional course manual.
2. Assess the relationship between test-taking skills and students' performance in the in-built activities in counseling found in the self-instructional course manual of UEW DE students.

### **Research question**

How do UEW distance education students use test-taking skills to solve in-built activities in counseling found in the distance education students self-instructional course manual?

### **Research Hypothesis**

There is a statistically significant relationship between test-taking skills and students' performance in the in-built activities in counseling found in the UEW distance education students' self-instructional course manual.

### **Significance of the study**

The findings of this research are intended to add to the existing information on the influence of study habits on academic performance students. The study will be significant to students, teachers, parents, school counselors, policymakers, and the government in assisting and encouraging students to realize the importance of test-taking skills on their academic performance. Students will benefit more from the findings of this study as they will offer the necessary assistance as and how to develop good study habits which will help to improve upon their academic performance. DE students will also benefit from the study on how test-taking skills affect their academic performances. The findings of the study will guide teachers and school counselors, who have the desire to see their students perform well by giving them the right techniques of developing test-taking skills.

### **Literature Review**

Self-instructional materials possess one common characteristic, which is questions in the text, inviting the learner to respond to. "The activities posed in both national and international self-instructional materials vary considerably in the modes of the teaching they adopt, the lay-out and design, the demands they make and the way they are flagged in the text" (Lockwood, 1992:22). These activities are given different names in different contexts. They are variously referred to as in-text questions (ITQs, self-assessment questions (SAQs) in the USA the terms 'adjunct aid' and 'embedded questions' may be used Owusu-Mensah et al. (2019). In the Ghanaian context, it is referred to as questions posed for DE learners to respond to.

Self-instructional materials are influenced by psychologist B.F. Skinner and his model of the learning process based on upon operant conditioning. Student's learning is scheduled to be precise, organized in logical steps. In

practice, the teaching materials (called frames) each of which required a response from the learner before the programme, could proceed to the next step in the sequence (Tait, 2004).

From Lockwood (1992) point of view, activities help students to think for themselves, apply learning, monitor their progress, and check their understanding. Further, learners come up with their own views, explanation, and solutions to sort out the features of an argument, to draw inferences, to engage in controversy. This, therefore, means learners are given the opportunity to be exposed to competing ideas and views, relate their own ideas and experience to required needed ideas through actively involvement.

The distance education (DE) programme of UEW has a well-established and effectively functioning course materials, administrative and student support sub-systems. The study materials are written by trained personnel who have undergone intensive training on writing self-instructional modules to ensure uniformity in the layout and design that fosters uniform teaching strategies. It includes a number of in-text activities forming the self-instructional modules. This reaffirms Lockwood (1992) assertion on activities in self-instructional modules that are meant to enhance active learning on behalf of students to enable them to have a better understanding of what they study in the materials so that they can apply them. From these advantages, the question now is whether in tackling these activities do the DE students need test-taking skills?

This is crucial because, with the implementation of self-instructional modules, there is the need to evaluate the process through input evaluation, process evaluation, product evaluation, and impact evaluation. In addition, questions like, were the learners who were to respond to the activities, the group that needed to be trained? Were the self-learning materials appropriate and also whether it should focus on the performance of learners after completion of the course using self-learning modules? Since self-instructional modules are supposed to improve the competencies and performances of learners so that they can provide good performances. What skills do the students need to be able to solve the in-built activities in the self-instructional modules? These and many more provide justification for the use of self-instructional modules.

Research findings, and practical experiences of researchers suggest that many students have defective test-taking skills/study habits. For instance, Nwani (1985) noted that poor academic performance is widespread among students in Nigerian schools. This is not different from Ghanaian schools in the sense that poor academic performance of students has been of much concern to all and sundry. Many studies have been carried out, which make available today an important catalog of research on study habits (Ogunmakin, 2001; Kumar, 2002; Gbore, 2006). It is argued that test-taking skills have a strong relationship with academic performance of students while other researchers (Owolabi, 1996; Whihite & D' Onofrio, 1993) suggest that it is the combination of the study habits and other factors that could explain students' academic performance in any course of study.

Students' academic performance, thus, is influenced by factors other than just low intellectual capacity. One such factor is test-taking skills. So, test-taking skills serve as the vehicle of learning, which may be seen as both means and ends of learning and play a very important role in the life of students. Success or failure of each student depends upon on their own test-taking skill.

In contemporary Ghanaian society, there are many factors considered to be influencing the ability of students to cultivate effective and efficient test-taking skills. Amoah, Owusu-Mensah, Gyamera, and Mensah (2019) posit that problems related to students' test-taking skills are associated with their response to homework and assignments, reading and note-taking, time allocation, study period procedures, students' concentration towards examination and consultation with teachers. The inability to utilize effectively and positively these sources of study habits may lead to problems that may stand in the way of effective study and good performance as espoused by counseling.

Within the counseling process, communication exists between two persons. The receiver interprets the sender's message in the same way the listener intended it (Akummey & Ackom, 2010). Within the counseling process, be it verbal, or non-verbal, communication plays a significant role. Amoah et al. (2016) posit that communication is the human cement that glues our society and all other cultures together. It links individuals emotionally and

intellectually to other individuals, groups, and institutions. Further, communication is often functionally defined as "the sharing of experiences" or "the transfer of meaning" or "the transmission of values," but it is more than the sum of these actions (Akumme & Ackom, 2010, p. 16). The point to draw home is that communication is very crucial in counseling. Amoah et al. (2015) believes that in counselling, communication correlates positively to scores students' obtain in practicum counseling.

In the area of listening comprehension and giving feedback, Owusu et al. (2019) looked at the relation between solving in-built activities, and listening comprehension from 156 learners from two study centres with similar characteristics and the results indicated that there was a significant inverse correlation between the two variables. Similar results were also gathered in listening comprehension and performance of learners in developing critical listening comprehension as pointed out by Asare (2006) who concluded that listening comprehension was positively correlated between listening and academic performance of learners in counseling. However, within the DE students, learners need to gather and assess the feedback themselves (Lockwool, 1990; Tait, 2004) through listening.

Another important point to note is that even though the study was not on anxiety and listening, as reported in Hartono (2019), anxiety correlates negatively with learners' performance in the classroom even though classroom results are not what high stakes require. Using the in-built activities considered as low stakes testing, studies that investigated testing context are both limited, and the investigation is limited to one particular skill of listening. Hence, developing listening skills for counseling is crucial. Further, Golchi (2012) found out that listening anxiety correlates negatively with listening comprehension. In support, Serraj and Binti Noordin (2013) in their study with participants of 210 Iranian English as a Foreign Language (EFL) students, discovered a moderate, negative association between anxiety and participants' performance on an **International English Language Testing System (IELTS)** like listening test.

In determining test-takers' skills in counseling, developing responding: continuation response and questioning seem important in counseling. One important point to note is that as Asare (2012) pointed out, in responding to any activity the scale is about judgmental to supportive, descriptive to critical, unorganized to organized and evaluative to interpretive comments. Further, Asare asserts that in responding to the task given, the test-taking skills activities correlate positively to students' performance. In developing skills in feedback: paraphrasing reflection of feelings; confronting, many studies have contributed to the fact that feedback correlates with academic performance, especially in counseling. According to Akumme and Ackom (2010), one critical ingredient in counseling is about the reflection of feelings. They maintain that feelings can be expressed variously. However, they assert that reflection on feelings is the act of uncovering and making known the feelings that underlie the counselee's comments or non-verbal behaviors. Reflection of feelings depends on observing and noting expressed and unexpressed feelings. Akumme and Ackom went further to explain that learning to reflect a counselee's feeling involves three steps; identify the counselee's feeling or the affective or emotional tone the counselee communicates, reflect these feelings back to the counselee in fresh or new words and make prescription check. Such peer feedback requires confronting, which is a responding skill of noting and gently pointing out to counselee that there are inconsistencies in what they are saying. In support, Boud and Kilty in Boud (2003) say feedback is very critical in every endeavor which Amini (2014) using 150 law students, posited that student's assessment preferences correlate positively and significantly with integrated assessment and non-conventional assessment.

As part from effective counseling, developing listening skills is critical. This is reinforced by Akumme and Ackom (2010), who believed that in any counseling exercises, listening needs to be effectively developed. In support, Winke and Lim (2017) found out that one of the issues in test-taking skill, anxiety, negatively correlated with performance on the listening test.

## Methodology Design

The ex-post facto research design (Charles, 1996; Turner, 2014) was adopted, employing the quantitative approach. In the ex-post facto design, the concern of the study was to establish the relationship between the independent variable, test-taking skills and the students' test performance on the in-built activities in the DE mentors counseling module books. There was no experimental treatment (Hatch & Lazarson, 1991) and random selection of the participants was not possible for this design.

### **Sample/sampling technique**

The participants were 18 (3 from the Ho study centre and 15 from the Sekondi study centre), graduate, DE students pursuing the one (1) mentorship, MEd programme. The courses they undertook included: Human resource development, action research, assessment and supervision, reflective practice, the concept of distance education, and counseling in mentorship. The participants were conveniently selected.

### **Instrument**

To measure the participants' test-taking skills, the UHCL counseling services test strategies format was adopted. The instrument consisted of eight (8) items measuring test-taking skills using a scale of 1 to 4. The scale was used to indicate how often each statement applies to whoever uses the instrument. The scale includes never=1, sometimes=2, usually=3, and always=4. The critical mean value set to interpret an individual's score is 2.5. If any individual scores a total of 28, it meant the one had developed good test-taking strategies. With a score of 21-28, the individual is probably pretty good at the taking test. With a total of 20 or less, the individual will benefit from strengthening his/her test-taking strategies. The instrument was pre-tested on five (5) of the DE mentorship students in one of the centres where the students attend lectures. A cronbach reliability value of 0.92 was calculated for the adapted instrument.

### **Data collection strategy**

Each of the students was made to respond to the statements on the instrument to measure the test-taking skills in this study. The calculated performance score of each of the students on each of the in-built activities in the self-instructional module was measured. The questions in the self-instructional modules had been standardized and served as in-built activities for the DE students to support them assess themselves on the programme.

### **Data analysis procedures**

The data was collected from 18 respondents representing the sample. Arithmetic means were calculated to indicate the students' test-taking skills scores. Then, the Kendall's tau-b ( $\tau_b$ ) correlation coefficient was also calculated, establishing the correlation coefficient. This is justified by Field (2009), who asserted that Kendall's tau was better for small data set since it produces a more accurate statistical calculation than Spearman's coefficient. Further, Edwards (1984) asserts that with a small sample, a pair may contribute excessively to the value of the correlation coefficient. Ensuring robustness of the statistical test, bootstrapping technique in calculating descriptive statistics test and correlation coefficient was adopted since LaFlair, Egbert and Plonsky (2015), and Hartono (2019) all maintain that bootstrapping could be implemented to obtain robust statistics when researchers have to deal with issues relating to small sample that is not normally distributed.

### **Findings and Dissuasion**

Research Question: How do UEW distance education students use test-taking skills to solve in-built activities in counseling found in the distance education students self-instructional course manual?

Analysis in Table 2 summarises the results on the descriptive statistics of data. The results showed that minimum and maximum scores for the test-taking skills ranged between 21 and 32 and the mean of means score of 2.523

showing that the students used test-taking skills to support their performances on the in-built activities found in the self-instructional modules.

Table 2: Arithmetic Mean analysis (Bootstrapping) on Students' Test-taking skills score

Variables	C value=2.5		95.0%CI		Min.	Max
	Mean	Std. Dev	Lower bound	Upper bound		
Test-taking skills	29.78	1.23	2.72	3.16	28	32
Communication process	2.665	1.015	2.43	2.93	26	31
Listening and giving feedback	2.571	.4952	2.12	3.12	27	29
Developing listening skills for counseling	2.163	.7899	1.90	2.34	23	27
Developing responding: continuation response and questioning	2.085	1.546	1.96	2.65	26	30
Developing skills in feedback: paraphrasing reflection of feelings; confronting	2.020	.5920	1.86	2.72	22	26
Developing skills in feedback focusing and summarizing	2.942	.6526	2.45	3.01	28	31
Overall score	2.543	.379	2.42	3.11	28	32

Source: Fieldwork data (2019)

However, there were variations in the use of the test-taking skills in solving activities like developing listening skills for counseling (2.163), developing responding, continuation response and questioning (2.085), and developing skills in feedback; paraphrasing reflection of feelings; confronting (2.020) which fell below the critical value. These findings collaborate and support Amoah, et al. (2019) and Owusu-Mensah's (2006) assertion that DE students use varied test-taking strategies in resolving in-built activities in self-instructional modules.

Hypothesis: There is a statistically significant relationship between test-taking skills and students' performance in the in-built activities in counseling found in the UEW distance education students' self-instructional course manual. To address the statistical calculations, Table 3 provides.

Table 3: Kendel's tau-b ( $\tau_b$ ) correlation matrix between variables (with bootstrap)

TTS	Communication process	Listening and giving feedback	Developing listening skills for counseling	Developing responding: continuation response and questioning	Developing skills in feedback: paraphrasing reflection of feelings; confronting	Developing skills in feedback focusing and summarizing	Overall score
TTS	-	.478 (.092)	.834 (.049)	.765 (.005)	.780 (.236)	.342 (.238)	.675 (.096)
							.789 (.004)

Source: Fieldwork data (2019).

P-values are in parentheses after the correlation coefficient

TTS=test-taking skills

From Table 3, the relationship between TTs and communication process was moderate ( $\tau_b = .478$ ;  $p = .092$ ). The correlation between TTS and listening and giving feedback from the in-built activities in the module was positive

in nature ( $r = -.834$ ,  $p = .049$ ) and significant. The correlation between TTS and developing responding: continuation responses and questioning was positively high correlation ( $r = .780$ ,  $p = .236$ ) but not significant.

The results further indicated that there was a significant positive correlation between TTS and developing listening skills for counseling ( $r = .765$ ,  $p = .005$ ), and significantly negative correlated ( $r = -.567$ ,  $p = .049$ ). However, the TTS and overall score were positively and statistically significantly correlated ( $r = .789$ ,  $p = .004$ ).

## Discussion

The results show an interesting scenario as the relationship between test-taking skills and the scores in the in-built activities between various segments of the counseling course varied across the in-built activities. This supports Larson-Hall (2012) argument as reported in Hartono (2019) that it is misleading to consider results of a statistical test not significantly significant only because its effect size is higher than the arbitrarily set 0.05 cut-off point. The results paved the way for other analysis on correlation to be done since the study focused on only counseling perspectives of the students used in the study. In establishing that there is a significant relationship between test taking-skills and academic performance of University of Education distance education students, the results indicated that the overall test-taking skills score of students showed that they had the requisite test-taking score used to solve the in-built activities. The findings were fascinating in that with the critical value of 2.5, Communication process (mean=2.665, std=1.015), Listening and giving feedback (mean=2.571, std=.4952) and developing skills in feedback focusing and summarizing (mean=2.942, std=.6526) showed students actually develop the requisite test-taking skills to answer the in-built activities. This is in support of what Owusu et, al (2019) posited, that DE students need the right test-taking skills to be able to manage how they work on the in-built activities. Further, the results support what Chang (2008) found which talks about anxiety in test-taking and listening comprehension in classroom assessment. A possible reason for the students not having test-taking skills in, for example, developing listening skills for counseling (mean=2.163, std=.7899), developing responding: continuation response and questioning (mean=2.085, std=1.546) and developing skills in feedback: paraphrasing reflection of feelings; confronting (mean=2.020, std=.5920) might be that of preparation towards the course. As DE students, time management strategies are crucial for effective learning and solving in-built activities. This means they might not have taken a serious view of using test-taking skills to engage the in-built activities. Such behavior might lead to desensitization due to familiarization of the activities and so made them not use the skills in test-taking (Hartono, 2019; Winke & Lim, 2014) which could be explored further.

## Conclusion and Recommendation

The study has revealed that the DE students used test taking-skills and turns to establish that there was an association between test-taking skills and student performance. Since the in-built activities in the DE module are often used to make decisions about students, results actually reflected DE students' performances, hence students need to develop relevant test-taking skills to support them solve in-built activities in the modules.

It is suggested again that since the in-built activities in the course manuals are believed to be standardized, effort need to be put in place to pilot test the questions for validation purposes. For internal consistency sake, rigorous test analysis needs to be done on the in-built activities before making them part of the manuals.

It is suggested that as part of the development of the modules, emphasis need to be the focus of support and that DE students identify the right test-taking skills to support them solve the in-built activities. Identifying the right test-taking skills can be highlighted by the facilitators/lecturers handing the DE students for self-recognition and use of skills in solving activities in the self-instructional modules.

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# Practical Work, Simulations and Feedback to Address Undergraduate Physics Students' Challenges in Understanding Circular and Rotational Motion

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## Abstract

This analytic paper explores the challenges that undergraduate students face in understanding introductory physics concepts on circular and rotational motion. Challenges are drawn from researchers' own experiences and from the research literature. An innovative method is proposed that combines practical work, PhET simulations, and a systematic feedback and feed-forward process following after the Nicol and Macfarlane-Dick (2006) model. Providing feedback at critical junctures of the teaching and learning process is pertinent for the efficacy of the approach. The experience of implementing the approach suggests positive prospects for efficacy for learning circular and rotational motion by pre-service physics teachers.

**Keywords:** Feedback, Feed-Forward, Circular Motion, Rotational Motion, Computer Simulations, Practical Work

## 1. Introduction

This paper presents a conceptual framework and the design of an innovative teaching and learning innovation used with pre-service teachers studying circular and rotational motion. The approach combines practical work, computer simulations, and systematic feedback and feed forward. Feedback employs the principles obtaining in Nicol and Macfarlane-Dick's (2006) model. Learning concepts and quantitative principles concerning circular and rotational motion is well known to be problematic and difficult for many students around the world (Searle, 1985; Roth, McRobbie, Lucas, & Boutonne, 1997). This can be a stumbling block in the appreciation of many applications of these concepts and principles in, for example, the motion of vehicles, planets and in atomic physics.

Student challenges with circular and rotational motion are commonplace. For example, they find it difficult to understand tangential velocity and tangential acceleration and confuse these concepts with those of velocity and acceleration in linear motion (Reif & Allen, 1992; Mashood & Singh, 2012 & 2015; Canlas, 2016). Reif and Allen (1992) observed that students had problems understanding the relationship  $a_t = \frac{dv}{dt}$  due to failure to appreciate that instantaneous velocity is tangent to the trajectory resulting in a corresponding tangential acceleration. They experienced problems too with centripetal acceleration  $a_c = \frac{v^2}{r}$ . Mashood and Singh (2015) suggested this could be a result of lack of differentiation of related but distinct concepts and equations.

Rebello and Rebello (2013) found that students considered angular velocity as being distinct for each particle in a rotating body. This led to failure to appreciate that all points on a rotating disc travel with the same angular velocity. The above problem is compounded by physics text books that introduce angular velocity of points on a rotating body by starting with the equation:  $\omega = \frac{\Delta\theta}{\Delta t}$  and further that  $\omega = \frac{v}{r}$ . Students failed to appreciate that the equation  $v = \omega r$  was only valid for circular motion with a fixed radius. This, according to Mashood and Singh (2015), could be due to a lack of differentiation of related but distinct concepts. Reif and Allen (1992) also found that students fail to discriminate concepts applicable to linear motion, non-uniform motion, and those applicable to uniform circular and rotational motion.

## 2. Problem statement

The above examples suffice to highlight the conceptual difficulties physics students encounter in learning concepts and quantitative principles of circular and rotational motion. Some of these difficulties are a result of misconceptions on circular and rotational motion, and some a result of a mix up with equivalent concepts in linear motion (Viridi, Mogharabi & Nasri, 2013; Canlas, 2016). It is important to tackle these difficulties, especially during the course of pre-service physics teacher education. Seaththa, Yuenyong, and Art-in (2015) and Mashood and Singh (2015) suggest the need for innovative teaching and learning approaches. In the context of a developing country such as Zambia, the need for innovation takes more prominence, given the unavailability of apparatus and equipment for standard experiments. The advent of computer simulations provides a good opportunity to transform learning opportunities for the innovative teacher and his or her students. Jimoyiannis and Komis (2001) observed that "Computer simulations are applications of special interest in physics teaching because they can support powerful modeling environments involving physics concepts and processes" (p. 183). It is important to design instruction that captures this power of computers. As suggested by Jimoyiannis and Komis (2001, computer simulations can help "students confront their cognitive constraints and develop a functional understanding of physics." In order for this to happen, the physics teacher needs to be facilitative to provide guidance and feedback at critical points in the learning activities.

## 3. Purpose of the research

This paper presents the design of an innovative teaching and learning approach that combines practical work, computer simulations, and systematic feedback and feed forward in learning concepts and principles of circular and rotational motion. The study used PhET Interactive Simulations developed and distributed as freeware by the University of Colorado Boulder (<https://phet.colorado.edu/>). The students were pre-service physics teachers pursuing the Bachelor of Education degree at Mukuba University in Zambia. The purpose of the paper is, therefore, to introduce the conceptual framework for an innovative teaching approach and to analyse prospects for impact in learning circular and rotational motion when feedback and feed forward at critical points are deliberately incorporated. This effort was part of a doctoral thesis which explored the research question:

How does the teaching of circular and rotational motion via a systematic combination of feedback, practical work, and computer simulations affect students' learning and attitude towards the topic of circular and rotational motion?

#### 4. Conceptual framework

The rationality for the design of the innovative teaching approach employed in the study lies in the conceptual framework depicted in Figure 1. According to Nicol and Macfarlane-Dick (2006), good feedback practice is quite critical to empower students to become self-regulated learners. Butler and Winne (1995) pointed out that self-regulated engagement with tasks entails, among other things, deliberating about strategies and self-monitoring to ensure learning goals are accomplished. Further to this, both feedback and feed forward are critical in giving 'students the possibility to elaborate on what is not yet understood, get hold of students' misconceptions and engage students in deep learning' (Gamlem & Smith, 2013; p.151). We conjecture that incorporating appropriate feedback and feed forward opportunities work to make the practical work and simulations more powerful learning experiences as suggested by Jimoyiannis and Komis (2001).

The conceptual framework in Figure 1 starts with the preparation of lessons and the identification of critical points in learning the circular and rotational motion. For these to be effectively learned, it is important to create a conducive environment that is interactive and experiential. To achieve this, experiences are provided through practical work and simulations explained in the case study. The interactive environment provided rich opportunities for peer and lecturer feedback and feed forward galvanised by the Nicol and MacFarlane-Dick's (2006) principles. These principles entail the following:

- Clarifying good performance in a manner that makes students appreciate and understand how they are expected to perform on a given task.
- Facilitating the development of self-assessment that increases the ability of students to self-regulate their learning.
- Giving quality written information, feedback on student's performance.
- Encouraging lecturer and peer dialogue to provide oral feedback.
- Encouraging positive beliefs and self-esteem in motivating the learners.
- Providing opportunity to close the gap between student performance and attainment of learning outcomes.
- Requiring lecturers to use the information gathered during lessons to help improve the teaching and learning process.

The external feedback sets up an internal feedback and feed forward process that helps in the attainment of learning outcomes in the affective, cognitive, and psychomotor domains. This internal feedback can assist students self-examine their understanding and self-regulate their learning of concepts and qualitative principles in circular and rotational motion. This expectation of the impact of feedback is borne out of the observation that self-regulated learners use cognitive and metacognitive strategies to regulate their cognition and effort, on for example physics tasks (Achufusi-Aka & Offiah, 2010).

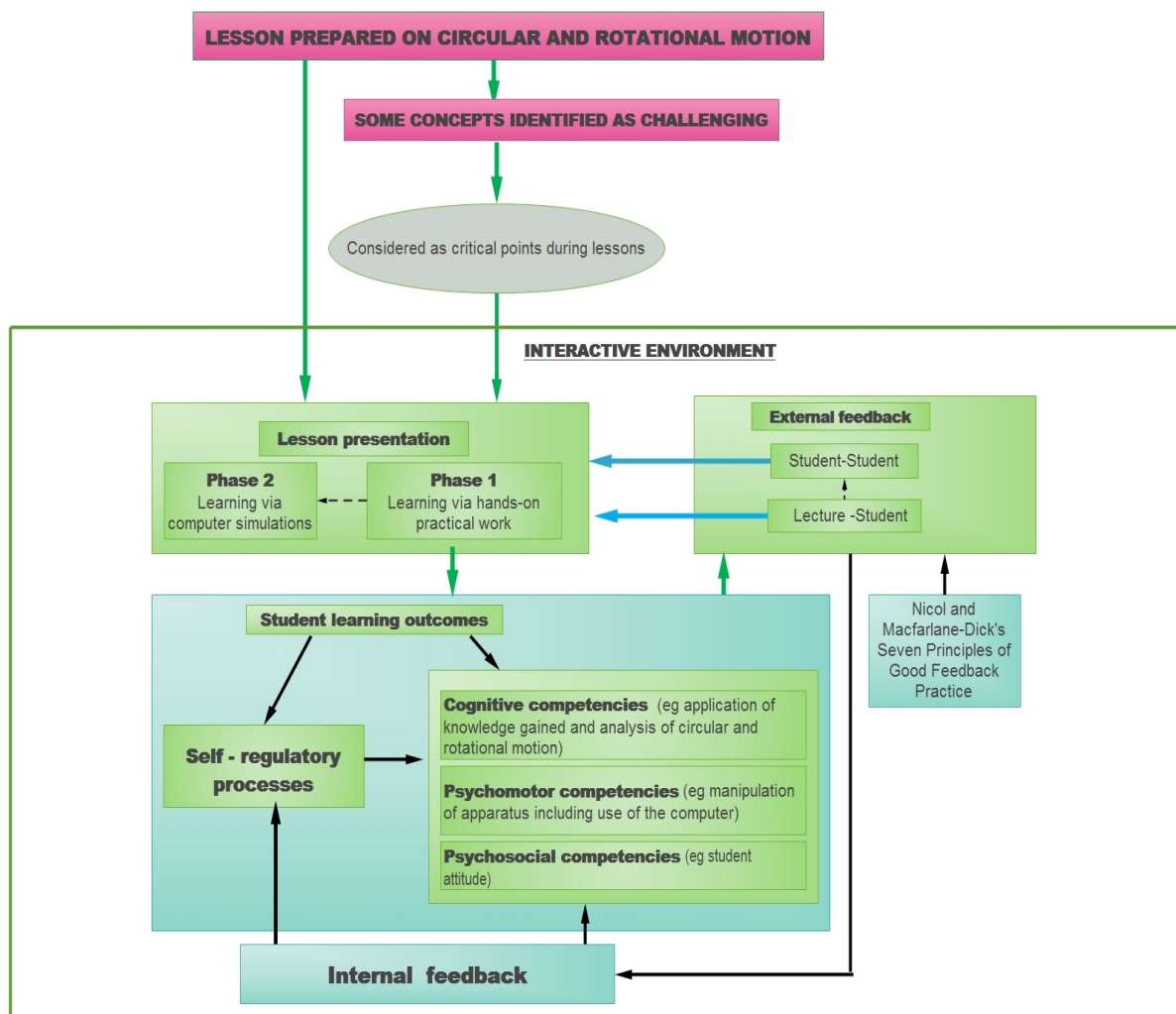


Figure 1. Conceptual framework for the innovative teaching method.

### 5. Intervention to integrate practical work, computer simulations, and systematic feedback

The conceptual framework in Figure 1 was used in the design of the intervention to integrate practical work, computer simulations, and a systematic feedback as pre-service teachers studied circular and rotation motion. Table 1 summarises and exemplifies the intervention that involved eight 1 hour 20 minutes long lessons. The intervention involved practical work (Phase 1) and computer simulations (Phase 2).

Table 1 shows that pre-service teachers did practical work and simulation activities to achieve specific learning objectives. For example, in the first-week, students in groups of 5-6 conducted practical work using the simple apparatus set up in Figure 2, followed by a simulation in Figure 3. Using the apparatus set up in Figure 2, they explored concepts and qualitative principles involving the relationship between tangential velocity  $v$  and radius  $r$ . The practical work involved students rotating an object attached to a string. The mass  $m$  was rotated horizontally, as shown in Figure 2. Radius  $r$  was varied and each time the corresponding circumference calculated. The periodic time  $T$  was determined, and the corresponding velocity  $v$  calculated. Oral feedback in the last column of Table 1 was centered on this concept. It helped the lecturer scaffold the practical activities.

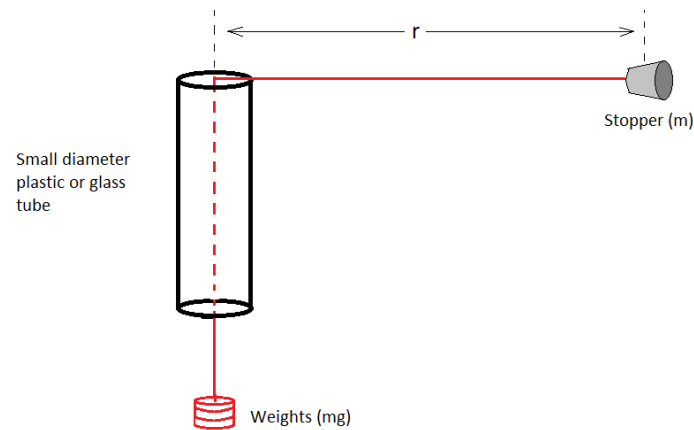


Figure 2. Simple rotational apparatus

Table 1. Summary description of lesson presentations

Phase	Learning objectives	Lesson description and purpose	Feedback
Week 1: Practical work #1	<p>Determine the relationship between tangential velocity <math>v</math> and radius <math>r</math>.</p> <p>Students should be able to discuss the equation <math>a_r = \frac{dv}{dt}</math>.</p> <p>Derive the equation <math>a_c = \frac{v^2}{r}</math>.</p>	<p>Practical work one was carried out to help students understand the relationship between <math>r</math> and <math>V_T</math>. The lesson helped discuss tangential velocity and acceleration so that learners would not confuse the two terms with the everyday use. Understanding of tangential velocity prepared students for lessons on the angular velocity. Student understanding of these concepts was gauged by the response they gave to the end of lesson task, which required them to derive the equation to show the relationship between <math>v</math> and <math>r</math>.</p>	<p>For oral feedback, focus students on describing the direction of mass <math>m</math> as it rotates. Give appropriate feedback after asking the group to explain the meaning of the equations <math>a_r = \frac{dv}{dt}</math> and <math>a_c = \frac{v^2}{r}</math>. For written feedback, focus on the student's description of the relationship between <math>v</math> and <math>r</math>.</p> <p>Students may show the relationships such as <math>v = \omega r</math>. Accept such equation but guide the student also to consider the relationship, <math>a_c = \frac{v^2}{r}</math></p>
Week 1: Practical work #2	<p>Determine the relationship between variables in the equation; <math>F_c = \frac{mv^2}{r}</math></p>	<p>Practical work one and two were combined because the same apparatus and measurements were used for both practical activities. The centripetal force <math>F_c</math> was introduced. The practical work also prepares students for tension force for a vertical plane. End of lesson task for this activity was designed to find out if students could apply quantitative principles they had learned.</p>	<p>When students start applying the equation <math>F_c = \frac{mv^2}{r}</math>. Ask them to explain the relationship between variables in the equation. Provide appropriate feedback (For written work or oral discussion).</p>
Week 1: Simulation #1	<p>Differentiate speed and tangential velocity.</p> <p>Differentiate tangential velocity and angular velocity.</p>	<p>Apart from helping students simulate what was learned in practical work one. Simulation one helped reduce the misconception that angular velocity is distinct for each particle in a rotating body. The activity was used to demonstrate that; <math>v = \omega r</math> This equation helped show the relationship between <math>v</math> and <math>r</math>. The end of the lesson task's aim was to help monitor student's understanding of the concept of angular velocity <math>\omega</math> and its relationship to <math>v</math> and <math>r</math>.</p>	<p>Ask the student to explain the meaning of the equation <math>v = \omega r</math> and to give appropriate feedback. For written feedback, note that the feedback that was provided under task for practical work one was expected to help students in a task for simulation one. Note student's description of the relationship between <math>v</math> and <math>r</math> and provide appropriate feedback to help students understand the relationship between <math>r</math> and <math>\omega</math></p>

Table 1. (Continued)

Week 1: Simulation #2	Describe the relationship between the direction of centripetal acceleration and tangential velocity.	The main focus for this simulation was to discuss the direction of centripetal acceleration and tangential velocity. The activity also helped students prepare for simulation on centripetal force. End of lesson task for simulation two was given to find out if students understood the relationships amongst $a_c$ , $v$ , and $F_c$ .	Focus on seeing student understanding of the direction of centripetal acceleration and tangential velocity after using simulations. Give appropriate feedback to responses. See also that students discuss and correctly indicate the directions of tangential velocity, centripetal acceleration, and centripetal force. In each case, give feedback. This applies to student oral and written responses.
Week 2: Simulation #3	Justify the relationships amongst centripetal acceleration $a_c$ , tangential acceleration $a_T$ , and total acceleration $a_{tot}$	The simulation helped students explore the relationships amongst variables in circular and rotational motion. It, for example, helped students understand equations such as $a_{tot} = \sqrt{a_T^2 + a_c^2}$ . It was expected that through exploration, students were able to differentiation-related but distinct concepts in circular and rotational motion.	See that students discuss and correctly use the quantitative principle to find tangential and centripetal components of acceleration. They must also show understanding of the use of $a_T$ and $a_c$ to find total or magnitude of the acceleration. Use appropriate feedback which focuses on the use of these concepts to find the total or magnitude of acceleration. This applies to oral and written responses.
Week 2: Simulation #4	Explain how frictional force helps keep an object in a circular path. Show the relationship amongst coefficient of friction, velocity, and angle of inclination.	Demanded students to explain how centripetal force caused an object to go round a curved path. Students used simulation to familiarised themselves with the importance of equations such as $F = \frac{mv^2}{r}$ , $f_s = \mu_s F_N$ and $v = \sqrt{\mu_s r \tan \theta}$ . The task for simulation four tested student understanding of centripetal force, velocity, and skidding.	Give appropriate feedback after asking the group to explain how frictional force helps keep an object in a circular path. Written feedback must also consider the same concepts.
Week 3: Practical #3	Explain the effect of mass distribution on an object's motion	Practical work three was a simple hands-on practical work to learn and prepare for concepts involving equations such as $I = \sum mr^2$ . It helped students understand the relationship between mass distribution and the moment of inertia.	Focus students on observing and discussing the effect of mass distribution on an object's motion. Give students appropriate feedback on this concept.
Week 3: Simulation #5	Analyse the effect of mass distribution on the moment of inertia. Use the equation $I = \sum mr^2$ .	Simulation five was conducted to explore the relationship between mass distribution and the moment of inertia. The task for simulation five was made up of conceptual questions which focused on testing student understanding of the effect of mass distribution on the moment of inertia.	Ask students to explain the equation $I = \sum mr^2$ . Give students appropriate feedback in connection with these concepts and quantitative principles.

For example, the critical moment comes after students had measured  $r$  and found  $T$ . They were first asked to explain the purpose of taking these measurements. In order to address the understanding of tangential velocity, students were asked to identify the direction mass  $m$  would take if the string was suddenly cut. This was the starting point to use feedback on this pre-identified critical point. Depending on student responses, the lecturer's responsibility was to provide feedback that could guide students towards the learning objective by helping them

observe that the direction of mass  $m$  was changing with time. This was the moment to help students discuss in their groups the relationship between  $v$  and  $r$ .

In order to enhance self-regulation, instructions given in the laboratory manual were used just as a guide, and students were not penalised for any improvisation that was safely done. For example, some groups had short strings. Instead of starting with  $r$  of 1.5m as indicated in the laboratory manual, students in some cases started with 1.2m. Feedback from the lecturer was given to encouraged learners to develop independent learning. The groups were, therefore, informed that 1.2m was another good choice for the initial length of  $r$ .

Another critical point that requires feedback and feeds forward, in this case, was the identification of the relationship between  $r$  and  $v$ . When the lecturer noted that students had challenges identifying the relationship, a question was posed to initiate group discussion. This was to encouraged lecturer and peer dialogue as supported by Nicol and Macfarlane-Dick's (2006) fourth principle of good feedback practice. Each time a question was posed, students were left to discuss it. This was done so that through student-student feedback, learners could acquire a deep understanding of the topic.

After discussing this relationship, the emphasis turned to concepts of tangential acceleration  $a_T$  and centripetal acceleration  $a_c$ . Basing on concepts from tangential velocity, the lecturer asked questions and initiated the feedback and feed forward process to help students define  $a_T$  and discuss the equation  $a_T = \frac{dv}{dt}$ .

Table 1 shows too the sample of simulation activities conducted, e.g., the simulation activity that followed the practical work. Figure 3 shows a screenshot of the PhET simulation activity that was used in simulation one (accessed from <https://phet.colorado.edu/en/simulations/category/physics>).

Using the simulation activity, students determined the radius  $r$  of rotation and the corresponding tangential velocity  $v$  displays on the screen. Radius  $r$  was measured using the ruler, which is displayed across the rotating disc. The velocity-time graph, including the value of the velocity in m/s was also displayed on the screen. The value of  $r$  was changed and the procedure repeated. Each time students noted the corresponding value of  $v$  displayed on the screen. Critical points similar to those which were identified when learning via physical hands-on practical work were utilised during this phase. As earlier discussed, understanding the relationship between  $v$  and  $r$  was still a critical moment for this phase. It required guidance through feedback and feed forward.

Angular velocity  $\omega$  was introduced during simulation one. Students related the value of  $r$  to  $\omega$  at different points on the rotating circular disc. The critical point came after students recorded four values of  $r$  and the corresponding  $\omega$ . At this moment, the lecturer initiated oral feedback and feed forward, and asked the group to explain the relationship between  $r$  and  $\omega$ .





Figure 3. Screenshot of a PhET computer simulation

In order to enhance the process of feedback, the lecturer asked questions to the group centered on the meaning of the equations  $\omega = \frac{\Delta\theta}{\Delta t}$  and  $\omega = \frac{v}{r}$ . The lecturer provided feedback to student's responses. Basing on concepts learned, students were asked to define angular velocity. The simulation activity ended with students answering the questions in Box 2.

## 6. Prospects for the impact of the intervention

This paper explores too the impact of the intervention following the work of pre-service teachers after completing the tasks in Box 1 (post-practical work) and Box 2 (post-simulation). These tasks were meant to assess understanding of concepts and quantitative principles discussed during the lessons.

### Box 1: Task for post-practical work

Using the ideas gathered in your practical work, formulate an equation which describes the relationship between velocity and radius. You must show all the steps.

Figure 4 shows a sample of written responses for a successful and for an unsuccessful student, respectively. In both cases, students were given written feedback in the form of detailed comments. For example, the comment given to the unsuccessful student was meant to highlight the concepts that the student failed to show in the equations. The focus was on the task and not the student in the hope to encourage positivity and recognition of error. The feedback for the successful student identified with successful elements in the task, i.e., 'Good. Relationship between  $v$  and  $r$  is correctly shown. It is well applied in the equation'. Unsuccessful students were allowed to re-submit corrected work.

Box 2 shows the task assigned to students following the PhET simulation experience. Figure 5 and Figure 6 show a sample of written responses by the students whose work was presented in Figure 4 (post-practical work). Figure 5 shows the work of the student who was unsuccessful in Figure 4; the student successfully responds to the post-simulation assignment. In both cases, students were given written feedback in the form of detailed comments. The student correctly shows the relationship between  $v$  and  $r$ .

*Successful solution*

- Where  $s$  is the distance travelled and  $t$  is the time taken,

$$v = \frac{s}{t}$$

For uniform circular motion, a body travels in a circle, Hence the velocity of the body is given by

$$\text{Velocity} = \frac{\text{Circumference}}{\text{Periodic time}}$$

$$= \frac{2\pi r}{T}$$

But  $T = \frac{t}{n}$ , Hence;

$$v = 2\pi r \times \frac{n}{t}$$

$$= 2\pi r n$$

$\therefore v$  is directly proportional to  $r$

Good relationship between  $v$  and  $r$  is correctly shown.  $T$  is well applied in the equation.

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*Unsuccessful solution*

It was observed that they was a specific period formation of a revolution from diagram 1 and 2

$$T = 2\pi r \dots (i) \quad T = 2\pi v \dots (ii)$$

Replace equation i and ii

$$\frac{2\pi r}{v} = 2\pi v$$

$$\frac{2\pi r}{2\pi v} = \frac{2\pi v^2}{2\pi r}$$

$$a = \frac{v^2}{r}$$

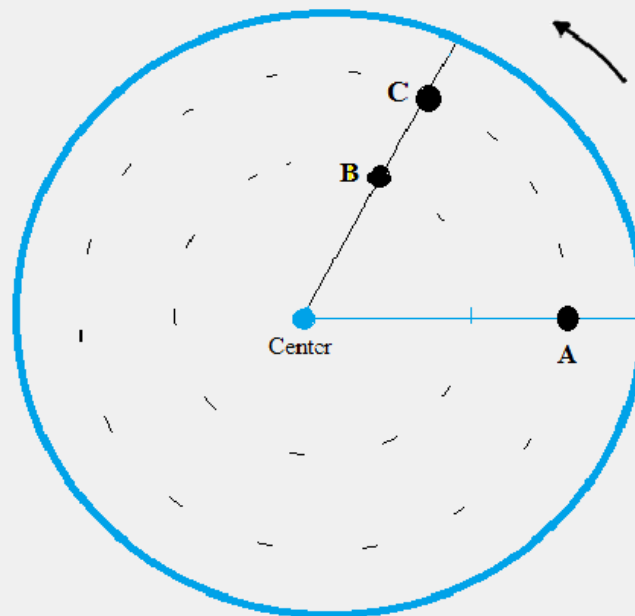
Relationship between  $v$  and  $r$  is not correctly shown. The equation  $2\pi r = 2\pi v$  is inaccurate.

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Figure 4. Sample written responses for a successful and unsuccessful student.

**Box 2: Task post-simulation**

1. Describe the relationship between radius and speed of rotation.
2. The figure below shows a circular disc rotating in the direction indicated by the arrow. Points A, B, and C are marked on the surface of the disc that is rotating at tangential velocities  $v_A$ ,  $v_B$  and  $v_C$  respectively.



Which of the following relationship is correct about these three velocities?

- A.  $V_C = V_B > V_A$ ; B.  $V_C = V_A > V_B$ ; C.  $V_C > V_B > V_A$ ; D.  $V_C = V_B = V_A$
3. Explain the reason for your answer to question (2).
  4. Which of the following relationship is correct about the angular velocity of points A, B and C.
- A.  $\omega_C = \omega_B > \omega_A$ ; B.  $\omega_C = \omega_A > \omega_B$ ; C.  $\omega_C > \omega_B > \omega_A$ ; D.  $\omega_C = \omega_B = \omega$

Task for simulation (one)

i) The relationship between distance and speed of rotation is that distance is directly proportional to speed in a circular path.

$V \propto Kr$  where  $r = \text{radius}$   
 $V = Kr$   $v = \text{velocity}$   
 $K = \text{constant}$

Relationship between  $v$  and  $r$  is correctly shown.

Figure 5. Sample written response post-simulation by former unsuccessful student



Figure 6 is of the student whose work was 'successful' in Figure 4; the student correctly gives the relationship between  $v$  and  $r$ .

Solutions for the task

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(1) The distance which is the radius is this is directly proportional to the speed which is the tangential velocity. Implying that the greater the distance the greater the velocity. The equation could be formulated as follows; where  $R$  is the radius and  $V$  is the tangential velocity

$$V \propto r \quad R \propto V$$

$$V = kR \quad R = kV$$

$$\frac{R}{V} = \frac{kV}{V}$$

$$\frac{R}{V} = k$$

$$k = \frac{R}{V}$$

Good  
Relationship  
between  $V$  and  
 $r$  is correctly  
shown.

Figure 6. Sample written response post-simulation by formerly successful student

## 7. Discussion

The experiences reported above point to the potential innovation and impact of integrating practical work, computer simulation, and systematic feedback for conceptual mastery among pre-service physics teachers. As shown in previous studies, a combination of simulations and practical work positively impacted the learning of topics such as mechanics, waves and optics, and thermal physics (e.g., Zacharia & Anderson, 2003). With reference to the conceptual framework presented here, this combination of activities yields the possibility of enhancing the development of competencies in all domains, cognitive, psychomotor, and affective. The computer simulations allowed students to explore the topic by changing variables and observing the outcomes (Moser, Zumbach & Deibl, 2017). They experimented and observed the results.

However, the value added by practical work and simulations will only be maximised through the provision of systematic feedback as the students work. Hattie and Timperley (2007) noted that when given correctly, the feedback has the potential to improve learning and will help students self-regulate their learning and to reflect on why they are doing particular tasks. As rightly observed by Achufusi-Aka and Offiah (2010), self-regulated learners in physics lessons tend to use cognitive and metacognitive strategies to regulate their cognition and effort, leading to better concept acquisition and mastery. In this study, pending the qualitative results of the study, the Nicol and Macfarlane-Dick (2006) model are proposed to be a useful and relevant model to achieve effective feedback and feed forward in learning difficult concepts in physics among pre-service teachers.

## 8. Conclusion

The paper flags out some of the challenges faced by undergraduate physics students when learning the circular and rotational motion. It devises a conceptual framework and explains the teaching and learning intervention that involved practical work, simulations, and critical moments for feedback and feed forward. While the results are pending analysis, use of internet-based resources such as the PhET simulations and practical work with feedback provided at critical junctures of teaching and learning, are conjectured to impact the learning of abstruse concepts such as those associated with circular and rotational motion.

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# Exploring Teachers' Perceptions on Schools' Openness to Change in Omani & Saudi Public Schools

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## Abstract

The purpose of this study is to determine schools' openness to change (SOC) in the Sultanate of Oman & Saudi Arabia based on the views of public school teachers. The study implements a quantitative approach using the Faculty Change Orientation Scale (FCOS) developed by Smith & Hoy (2007). A sample of (719) subjects is selected during 2018-2019 school years. The data is analyzed through descriptive statistics, t-test, and ANOVA. The research concluded that Saudi and Omani teachers showed high positive perceptions regarding the degree of principal openness to change (POC) and Teacher openness to change (TOC); nevertheless there were no significant differences between Saudi and Omani teachers in SOC; in addition there were significant differences between male and female teachers in favor of female teachers, finally there were significant differences among elementary, middle, and high schools in favor of elementary schools. The current study contributes to the field of school change management in the Arab Gulf States culture, especially in providing insights of teachers from two different Arab Gulf States.

**Keywords:** Teachers' Perceptions, Schools' Openness to Change, Oman, KSA

## Introduction

Change is one of the most significant and widespread concepts in today's world. It is possible nowadays to experience change in every aspect of life. For organizations, change has been thought of as an important factor in the development of any organization. Change can be defined as "a movement from one state to another" (Hargreaves, 2004, p.287). In other words, change is the process of transformation from one status to another in a planned or unplanned manner (Hoşgörür, 2016). It is a term used to describe an improvement process and the results of this process (Altrichter, 2000). From an organizational point of view, change describes a process experienced by an organization so as to provide more products and services in a more efficient, productive, and competitive way (Hoşgörür, 2016). As people differ with regard to their perceptions toward change (Yilmaz, 2010); researchers have used different ways for conceptualizing people's reactions toward change (Oreg et al.,

2007). Positive terms such as change readiness, change commitment, change acceptance, openness to change; and negative terms such as change resistance, change cynicism, change avoidance are used in literature interchangeably (Kareem & Kin, 2018).

Literature in the field of change acknowledged the need for schools to go through change initiatives (e.g., Fullan & Suzanne, 1992; Elmore, 2004; Ghavifekr et al., 2013). Nowadays, change has become a must for ensuring and sustaining schools' development (Hoşgörür, 2016). Schools, as the core of the education system, are subject to inescapable internal and external change pressures (Hallinger, 2004; Hargreaves, 2002; Harris, 2006). Therefore, schools are required to get along with the demands of the ever-changing environment to survive in such a globalizing world (Küçüksüleymanoğlu & Terzioğlu, 2017). Hence, a school should be ready for change in the most careful and well-planned way, since any positive or negative change in the educational organization will have an unavoidable impact on people such organization is designed to train (Beycioglu & Aslan, 2010).

The critical factor that influences the success or failure of change is precisely the individuals' openness to change, which is related to positive or negative attitudes towards change (Kareem & kin, 2018). Openness to change refers to the individuals' willingness to support change, and is related to the extent to which employees support change willingly. It is accepted as a proposal for readiness to change and a critical factor for identifying the success of organizational change (Yilmaz, 2010). Individuals' openness to change is regarded as a necessary, initial condition for the success of planned change (Blackman et al., 2013). On the other hand, change interventions in the organization often fail because of the limited attention given to the human element (Coetzee & Chetty, 2015). Literature demonstrated how influential individuals who are willing to change are in the success of changes; according to (Tasdan, 2013; Demirtas, 2012; Yilmaz, 2010) change depends mainly on the willingness of individuals to change and their positive attitudes to its potential consequences. Attitude towards change was defined by Vakola and Nikolaou (2006) as certain regularities of the individual's thoughts, feelings, and predispositions towards change launched by the organization. Hayes (2014) and Kotter (2012) indicated that individuals' attitude towards change is a good predictor of change readiness in any organization; it can be seen as one major determinant of the person's intention to perform the behavior to support or resist change. Bareil et al. (2007) found that positive attitudes toward change in schools are more important in achieving the goals of the school and in succeeding in change programs. Similarly, Thomas (2003), Oreg (2003), and kareem & kin (2018) argued that positive attitudes towards change, in schools, constituted an important indicator in adopting innovations, and may result in involving actively in change initiatives, or highly committed to change. On the other hand, negative attitudes towards change will be a disabling factor when trying to implement change initiatives in the organization (Vakola & Nikolaou, 2006). Change resistance makes the change impossible; resistance is a kind of barrier that stops the change from proceeding (Vrabcová, 2015), as it may generate some negative behavioral intentions such as absenteeism, withdrawal, intentions to quit, or sabotage the intended initiatives (Kareem & Kin, 2018). As a matter of fact, change resistance is considered as one of the main reasons for failure of processes that involve change in organizations in general and in the educational systems in particular (Fullan & Hargreaves, 1996; Zimmerman, 2006). Therefore; Vrabcová (2015) argued that the openness to change, flexibility, and pro-innovative involvement have become an important part of new value system necessary and specific for the teaching profession and modern teachers.

Change puts some people in the spot (Hargreaves, 2000). It relies mainly on the willingness of those people to change and their positive ideas as to its prospective consequences (Konakli, 2014). With regard to the school community, principals and teachers come to the forefront; they are the most important people in the school to lead the educational change. Literature (e.g., Griffith, 2010; Demirtas, 2012; Hoşgörür, 2016) assured that teachers and principals are considered the most potential variables are influencing the success of change at schools; and their openness to change might affect the success of change that has been carried out in their schools. Whatever change is, school principals are central figures in the leadership of change (Fullan, 2001). Strong leadership and management are required to cope with change problems and to create potential opportunities to make major reforms in the organization (Wallace, 2004). Since principals are central to preparing and organizing schools for change, it is important to be aware of how open they are to change (Harris, 2001), as the roles of a modern principal include being the doer and the leader of change inside the school (Konakli, 2014). In this regard Liu (2010) refereed to two main factors in change leadership, namely: 1) Leader's

Change Selling Behavior, which means action that attempts to promote change inside the organization and make it clear why change was necessary, 2) Leader's Change Implementing Behavior, which means action to push a change forward and support success throughout implementing the change. Teachers also can be considered as key components to the success of change initiatives inside their schools (Mitchell & Shoho, 2017). Over the course of their career, teachers encounter change continually (Hargreaves, 2004); they are both practitioners and critical resources of change (Tang, Lu & Hallinger, 2014). The achievement of change initiatives is mainly based on the effective involvement of teachers in the process (Küçüksüleymanoğlu & Terzioğlu, 2017). Devos et al. (2007) argued that organizations would be able to survive and succeed as long as they and their employees are prepared to change.

Considering the Arab context, studies (e.g., Al-Mahdy, Emam & Hallinger, 2018; Hamad & Al-Ani, 2016; Al-Ani & Ismail, 2015; Al-Taneiji & McLeod, 2008) revealed that during the past decade the education systems in nearly all the Arab Gulf states have witnessed dramatic change. Gulf leaders acknowledged the fact that the oil economy is doomed to either a quick or a lingering death, and the long-term economic growth required a movement, beyond that oil economy, towards the development of knowledge-based economies (Education). This recognition resulted in a radical and revolutionary change in education systems in these states.

Education in Sultanate of Oman in general and the MOE, in particular, is facing dramatic changes as it struggles to meet the demands of the current century. These circumstances drove the MOE to adopt a new approach for management that will enable it to deal with these challenges and pressures (ALNabhani, 2007). During his participation in "the university of the 21<sup>st</sup>-century conference" held in Muscat, Dearing (2001) claimed that "It is already widely accepted that the rapid pace of advance in knowledge, and pace of economic change, will require us to update our knowledge and skills" (p.29-30). This statement could be considered as advice to educators in facing the challenge of knowledge and technology revolution. The MOE in Oman has considered the importance of change and started educational development programs since 1994, focusing on adaptation within the national educational systems and the development requirements (MOE, 2002, P.146).

With regard to the Saudi Education, when compared to other countries, the Saudi Education System requires development in many aspects specifically in the areas of teaching methods, updating the curriculum content, increasing in-service teacher training programs and using technology inside classrooms (Al-Jarf, 2005). As a matter of fact, Saudi Education is a centralized educational system; and this centralization influences Education in many ways such as: building construction, curriculum design, teacher training, working conditions, and school equipments which are all provided by government (Sywelem & Witte, 2013). Studies (e.g., Ibrahim, Al-Kaabi, & El-Zaatari, 2013; Al-Mahdy & Sywelem, 2016) claimed that teachers in Saudi Arabia and the rest of Arab States are not involved in the planning process and not provided with effective training programs. Definitely, that ignorance of teachers has a negative impact on teachers' performance; Alnahdi (2014) claimed large numbers of Saudi teachers display a lack of a sense of responsibility, desire, and enthusiasm for teaching, which reflects on their students' achievement. Al-Mahdy & Sywelem (2016) referred to the absence of sharing practices among teachers which are considered as an obstacle in front of improving school performance, as teachers won't be able to get benefit from the expertise of one another.

In order to keep pace with the rapid developments in educational activities, continuous development of the Saudi educational system and certain regulations are used to implement educational change. In 2007, a huge project sponsored by King Abdullah Bin Abdul Aziz was launched for the development of the public education sector in Saudi Arabia. The Ministry of Education (MOE) identified thirty-nine steps to implement this project which included curriculum development, professional development programs for teachers, improvement of the educational environment, and extra-curricular activities for students (Ministry of Education, 2008).

Based on the foregoing review, the objective of the present study is to examine the schools' openness to change in two Arab Gulf States (Saudi Arabia & the Sultanate of Oman) from teachers' perspective. The current study will contribute to the field of school change management in the Arab culture, especially in providing insights of teachers from two different Arab States.



## Purpose and Research Questions

Literature, mentioned above, indicates that the success of change depends on the willingness and openness to change as well as a realization of the fact that change is continuous. The purpose of this study is to determine schools' openness to change in two Arab Gulf States (Saudi Arabia & Sultanate Oman) based on the views of public school teachers. The current study is guided by the following research questions:

- RQ1. What is the level of teachers' and principals' openness to change according to teachers' views?  
 RQ2. To what extent, if any, are there significant differences among teachers' perceptions regarding the level of schools' openness to change based on the teacher's country (Oman or KSA)?  
 RQ3. To what extent, if any, are there significant differences among teachers' perceptions regarding the level of schools' openness to change based on teacher's gender (male or female)?  
 RQ4. To what extent, if any, are there significant differences among teachers' perceptions regarding the level of schools' openness to change based on the educational stage (elementary, middle, or high school)?

## Methodology

In this section, of the paper, we describe our methodology in terms of the research sample and measuring instrument.

### *Sample*

The sample of this research was (719) subjects, including (396) from Omani public schools teachers and (323) teachers selected from Saudi Arabian public schools. Data were collected during the spring semester of the 2018-2019 school years. Table 1 shows the specifications of the participants according to grouping variables.

Table 1 Participants' Demographics

Nationality	Male	Female	Primary	medium	Secondary	Total	Percent
Omani	109	287	152	121	123	396	55.1%
Saudi	101	222	140	83	100	323	44.9%
<b>Total</b>	210	509	292	204	223	719	100%
<b>Percent</b>	29.2%	70.8%	40.6%	28.4%	31.0%	100%	-----

Note. N=719

A letter of invitation, consent form, and the survey package were sent electronically to Omani & Saudi teachers.

### *Measuring instrument*

The Faculty Change Orientation Scale -FCOS, developed by Smith & Hoy (2007), was used to achieve the purpose of this study. To avoid copyright issues, the researchers asked permission to use the Scale. Dr. Wayne K. Hoy, a research colleague of the authors designated to respond to requests for the use of the instrument, granted permission.

Whereas the first part of the Scale contained questions regarding the participants' country, gender, and educational stage; the second part was based on the items of the Schools' Openness to Change Scale. Purposely, the Scale focuses on participants' perceptions of three important aspects of change: Faculty openness to change (9 items); Principal openness to change (6 items); and Community press for change (4 items). The FCOS Scale utilizes a five-point Likert scale from 1= strongly disagree to 5= strongly agree. In this research, the first two aspects of the FCOS scale, contained items regarding teachers and principals' openness to change, were used. The selected items of the Scale are categorized into representative groups as follows:

- Faculty openness to change: items 1, 2, 5, 6, 8, 10, 13, 14, 15
- Principal openness to change: items 3, 7, 9, 11, 12, 19

### *Translation/back-translation technique*

For Arab Participants, the researchers used the Arabic version of the FCOS Scale. The translation/back-translation technique was used to translate the FCOS Scale; three independent professional translators were involved in the process. First, one of the translators converted the scale statements from English to Arabic. Then two other translators independently converted the scale statements back to English. After that, the two English versions of the scale statements were compared to the original scale statements. Modifications were made to the Arabic versions as a result of the issues raised from the back-translated items. As Geisinger (2003) explained, "The quality of the translation is evaluated in terms of how accurately the back-translated versions agree with the original text" (p. 107).

In addition, the researchers transformed the negative-worded items of the FCOS scale into positive-worded items, in order to avoid participants' misunderstanding of the scale, for example, the item no. (6) "In this school, major change is resisted" was changed to: "In this school, major change is accepted."

The corrected final version of the FCOS Scale is administered to a group of public school teachers in Saudi Arabia and Sultanate of Oman. The internal consistency of the variables was analyzed using Cronbach's alpha. Table (2) illustrates the results of internal consistency analysis, in the Arabic version of the questionnaire:

Table 2 Internal Consistency Analysis for the FCOS Scale

FCOS subscales	Cronbach's alpha	1	2	3
Principal openness to change	0.945	1		
Faculty openness to change	0.935	.606**	1	
SOC	0.946	.873**	.917**	1

The Cronbach's alpha coefficients for each variable were higher than the recommended benchmark of 0.70 (Hair et al. 2010). We also check internal consistency for each item, results indicate all items have a strong significant correlate (above .70\*\*) with sub-dimensions and with a total degree of SOC. These results suggest a satisfactory scale of internal reliability.

### **Results**

In this section, the authors presented the results of statistical analyses of the data in order to achieve the research aims described earlier. Descriptive statistics were used to check for the level of SOC as perceived by teachers in their schools. Differences based on country and gender variables have been checked using t-tests; furthermore, differences based on the educational stage have been checked using analysis of variance (ANOVA).

### *Level of SOC*

Teachers' level of agreement regarding schools' openness to change is defined according to the descriptive statistics for all responses of (719) teachers on the items of FCOS. Participants from Saudi Arabia and Sultanate of Oman responded to the items on the FCOS Scale based on their level of agreement (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). Mean scores were calculated for the overall response and for each item of the FCOS Scale. Results of the analysis are presented in Table 3.

Table 3 Questionnaire Overall and Dimension Mean Scores

SOC subscales	Mean	Std. Deviation	Attitude
Faculty openness to change	3.92	0.79	high
Principal openness to change	4.08	0.97	high
SOC	3.98	0.78	high

Note. N=719

The overall outcome of the analysis on the dimensions of change orientation is presented as in Table 3. Findings of the analysis reveal that the two selected dimensions of change orientation (faculty openness to change & principal openness to change) have high mean scores of (3.92, 4.08) respectively.

However, the mean score of principal openness to change ( $X=4.08$ ) is higher than faculty openness to change ( $X=3.92$ ). This finding indicates that school leaders in KSA and Sultanate of Oman are committed to change. This is because change is viewed as something that could not be avoided. In general, the openness to change among teachers and school leaders in both KSA and Sultanate is high.

In finding a more in-depth analysis of the practice level for all of the dimensions in the change orientation aspect, the descriptive analysis of each dimension is provided in the subsequent sub-topics:

Table 4 Descriptive Statistics for the Faculty Openness to Change Dimension

Items	Mean	SD	Attitude	Rank
In this school, faculty welcomes change.	3.86	.99	high	6
Faculty in this school embraces new ideas.	3.98	.96	high	2
In this school, teachers are receptive to substantial changes.	3.92	.96	high	6
In this school, major change is accepted.	3.96	.92	high	4
Teachers In this school readily accept changes to new rules and procedures.	3.82	.97	high	8
Faculty accepts all but minimal changes.	3.95	.95	high	5
The rhetoric of change is strong, and actual change is considerable.	3.81	.99	high	9
Teachers would rather change	3.97	.93	high	3
In this school, faculty relishes innovation.	4.01	.93	high	1
'frequently' range	3.92	.95	high	....

As shown in table 4, the overall level of practices on the faculty openness to change dimension is high with the mean score of ( $X=3.92$ ) and standard deviation of ( $SD=0.95$ ). This indicates that most Saudi and Omani teachers have positive and open perception toward change initiatives. Most of them expressed that they are open to change and they welcome change. The results revealed that all participants scored the scale items in faculty openness to change dimension as "agree" level with mean scores of ( $X=4.01$ ,  $SD=0.93$ ) for the first item "faculty relishes innovation"; ( $X=3.98$ ,  $SD=0.96$ ) for the second item "faculty embraces new ideas" and ( $X=3.81$ ,  $SD=0.99$ ) for the last item "actual change is considerable". Further, mean scores of all items showed that teachers' scores were close to "strongly agree" regarding faculty openness to change dimension.

Table 5 Descriptive Statistics for the Principal Openness to Change Dimension

Items	Mean	SD	Attitude	Rank
In this school, the principal balks at new suggestions.	4.17	0.99	high	1
In this school, The principal is rapid to change.	4.08	0.98	high	5
In this school, the principal is committed to major change.	4.12	0.99	high	2
The principal often supports changes suggested by parents	3.93	0.98	high	6
The principal in this school embraces change initiatives	4.10	0.99	high	3
In this school, the principal is committed to change	4.09	0.99	high	4
'frequently' range	4.08	0.99	high	--

As shown in table 5, the overall level of practices on the principal openness to change dimension is high with the mean score ( $X=4.08$ ) and standard deviation ( $SD=0.99$ ). This indicates that most Saudi and Omani teachers

perceive their school's principals as being supportive of change, open to change initiatives in schools. Most of the teachers agree that their school principal is very committed to change efforts. The results indicated that majority of the teachers scored the scale items as choosing "agree" level with mean scores of ( $X=4.17$ ,  $SD=0.99$ ) for the first item "the principal balks at new suggestions"; ( $X=4.12$ ,  $SD=0.99$ ) for the second item "the principal is committed to major change", and ( $X=3.93$ ,  $SD=0.98$ ) for the last item "The principal often supports changes suggested by parents". Further, the mean values of all items revealed that participants' ratings were very close to "strongly agree" level regarding the principle openness to change dimension.

### *Country differences in SOC*

As shown in Table 6, t-test results show that teachers in the two countries (Saudi Arabia & Sultanate of Oman) have somewhat similar degrees of perception of the level of SOC.

Table 6 t-test for SOC by Country

SOC subscales	Omani teachers		Saudi teachers		T-Value	df	Sig
	M	SD	M	SD			
Teachers openness to change	3.88	0.74	3.96	0.85	-1.35	717	0.18
Principal openness to change	4.06	0.91	4.11	0.99	-0.71	717	0.48
<b>SOC</b>	<b>3.95</b>	<b>0.73</b>	<b>4.02</b>	<b>0.82</b>	<b>-1.19</b>	<b>717</b>	<b>0.24</b>

According to the results shown in the above table, participants' views about teachers' openness to change did not show any significant differences according to country variable (Oman & KSA) ( $t\text{-value}=1.35$ ,  $p=0.18$ ). Similarly, There was no significant differences between the participants' views regarding principals' openness to change ( $t\text{-value}=0.71$ ,  $p=0.48$ ). As for the overall SOC, Saudi teachers have higher mean score ( $X=4.02$ ) than Omani teachers ( $X=3.95$ ) concerning school openness to change; however, there is no any statistically significant difference among the participants. This result reflects the similarities among the educational systems in the Arab Gulf Countries.

### *Gender differences in SOC*

As can be seen in Table 7, t-test results show that teachers have different degrees of perception of SOC according sex.

Table 7 t-test for SOC by Gender

SOC subscales	Male teachers		Female teachers		T-Value	df	Sig
	M	SD	M	SD			
Teachers openness to change	3.69	0.82	4.01	0.76	-5.00	717	0.00**
Principal openness to change	3.86	0.99	4.18	0.92	-4.02	717	0.00**
<b>SOC</b>	<b>3.76</b>	<b>0.80</b>	<b>4.08</b>	<b>0.75</b>	<b>-5.10</b>	<b>717</b>	<b>0.00**</b>

Note: \*\* Significant at 0.01

According to the results of the analysis, shown in Table 7, teachers' views regarding openness to change showed a significant difference according to participants' gender ( $t\text{-value}=4.02$ ,  $p=0.00$ ). Female teachers have higher mean score ( $X=4.18$ ) than male teachers concerning schools' openness to change ( $X=3.86$ ). This means that female teachers have more positive views towards schools' openness to change than male teachers. Similarly, There was a significant difference between the participants in their views regarding principals' openness to change ( $t\text{-value}=5.00$ ,  $p=0.00$ ). More female teachers ( $X=4.01$ ) than male ones ( $X=3.69$ ) reported that principals were open to change initiatives.

With regard to the overall SOC, the results revealed that there was a statistically significant difference among teachers in SOC according to gender variable ( $t\text{-value}=5.10$ ,  $p=0.00$ ). Female teachers have high mean scores

( $X=4.08$ ) than male teachers ( $X=3.76$ ) regarding schools' openness to change. This means that female teachers in both Saudi Arabia and Sultanate of Oman are more open to accept change than male teachers.

### *Educational Stage differences in SOC*

To address this question, SPSS software was utilized to perform one-way analysis of variance (ANOVA) and report the findings, and a post hoc analysis was conducted to compare and analyze mean scores from the SOC to determine which mean raw score ratings were different.

Table 8 One-way ANOVA for SOC by Educational Stage

SOC	Elementary		Middle		High		F	Sig
	M	SD	M	SD	M	SD		
Teachers openness to change	4.04	0.77	3.90	0.77	3.76	0.81	8.31**	0.00
Principal openness to change	4.21	0.90	4.05	0.98	3.95	0.99	4.77**	0.00
SOC	4.11	0.73	3.96	0.77	3.84	0.80	8.20**	0.00

Note: \*\* Significant at 0.01

As shown in Table 8, the results suggest that there was significant differences among the participants in their views of teachers' openness to change [ $F= 8.31, p<.01$ ] and in their views of principals' openness to change [ $F= 4.77, p<.01$ ] due to the educational stage variable (Elementary, Middle & High). Scheffe's test indicated that the differences in the educational stage were in favor of elementary school.

### **Discussion**

Findings of this study revealed that the overall practice level of the dimensions in change orientation of public schools in both KSA and Oman is high. This situation shows that teachers and school principals are very positive and open-minded towards changes and innovation. In relation to perceived openness to change in Omani and Saudi schools, when descriptive study results are considered, it becomes clear that teachers perceive their colleagues (faculty) and principals open to accept and welcome change. Specifically, the results revealed that both Omani and Saudi teachers agree to the perception of their faculty's openness to change with high degrees of receptivity degree ( $X$  faculty=3.92). That is, teachers declared that new ideas and substantial changes are welcomed by faculty of the schools with high receptivity. Similarly, when teachers were asked to indicate their perception related to innovation in their school with changes in rules and procedures of the schools, they indicated that these changes were embraced by the faculty with a high level. Concerning teachers' perceptions of the principals' openness to change in schools, the findings of the descriptive statistics showed that principals of Omani and Saudi schools, as perceived by the participants, welcome new change interventions in schools with high degrees of receptivity degree ( $X$  principal=4.08). Indeed, when teachers were asked to point out the dedication of the principals to change practices, they assured that principals in their schools devote themselves to changes with high willingness. These findings are supported with findings of previous researches that concluded with teachers realizing and understanding the importance of change and innovation in education (Fullan & Suzanne, 1992; Hargreaves, 2005; Ghavifekr et al., 2013; Hamzah et al., 2018;).

Teachers are the most critical element of the education system. For this reason, the success of change practices in a school is largely dependent on teachers themselves. Effective involvement of teachers in the process is a fundamental requirement for the achievement of change initiatives. As Devos et al. (2007) claimed that organizations would be able to survive and succeed as long as they and their employees are prepared to change. Also, this view is in line with Jamil (2001) who assured that actual changes would not take effect in the organization if its people do not have a positive attitude and are not sure of the need for the change. Changes will result in something that is expected from it if it is assisted with increased consciousness and positive attitude among teachers.

According to the results of the analysis, teachers view about school' openness to change showed significant differences according to participants' gender ( $t$ -value=5.00,  $p$ =0.00). Similarly, There were significant differences among the participants in their views of principals' openness to change ( $t$ -value=5.00,  $p$ =0.00). More female teachers ( $X$ =4.01) than male ones ( $X$ =3.69) reported that principals were open to change and welcome change initiatives. The analysis suggested that differences came in favor of female teachers, which means that female teachers in KSA and Sultanate of Oman are more open to change than male teachers.

In this study, Omani and Saudi teachers perceived school principals as supportive to change initiatives inside their schools. The school principals are responsible for establishing a vision in their schools and ensuring the adoption of this vision by school members. Studies have reported that the roles of principals are much in the process of change (Portin et al., 2006; Cooner et al., 2008). It is difficult to realize the change in an organization that does not have leaders with the ability, the mission, and the vision to manage change and encourage it.

### Implications and Conclusion

The success of change practices in schools, which are educational organizations, depends on the acceptance of those practices by the administrators and teachers of the school. Apart from that, in order for those practices to be successful, administrators and teachers also have to be open and adapt to change. Change is a difficult task. Considering that people who make up groups and organizations have the knowledge and experiences that they get from different environments with different opinions, thoughts, and tendencies, adaptation to change can be seen as a challenging and difficult process in terms of organizations.

Teachers have to be the people who lead the change in school. Teachers need to take the initiative to learn from each other and to improve teaching in school, which is an important variable in terms of change. For a successful and healthy organizational change, it can be said that teachers in the school must understand the organizational change process effectively and internalize this process by showing necessary behaviors.

The attitude of being ready for change is the first step of change applications. If change is successful, organizational change initiatives are adopted by employees. On the other hand, when the attitude of readiness to change is neglected, employees will be faced with resistance either actively or passively. Therefore, creating an attitude of readiness to change while working in the success of organizational change initiatives emerges as an important necessity.

In reference to the implications of this study, it recommends that educational policymakers in Oman & Saudi Arabia should guide and support schools' openness to change. While this study will add to the existing literature on change and school climate, it is hoped that educational authorities, school principals, teachers, and stakeholders are to be provided with insights into the dynamic relationship between change and school climate resulting in better change management and positive climate in schools that contribute to student achievement.

**Note:** Some parts of the earlier version of this paper have been accepted and scheduled to be presented at The British Educational Leadership, Management and Administration Society (BELMAS) Annual Conference at Jury's Inn, Hinckley Island, Leicestershire, the UK on July 12- 14, 2019.

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# Teaching Academic Writing in Higher Education

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## Abstract

Academic writing is one of the most complex tasks students encounter in university. Both domestic and international students struggle with academic writing; however, international students also face language barriers and are unfamiliar with western academic writing genres. Since many instructors don't know how to instruct academic writing as a process, the fields of Rhetorical Genre studies (RGS), and English for Specific Purposes (ESP) provide theoretical frameworks that can be applied pedagogically in order to teach academic writing effectively in any university classroom. This paper also contains a pedagogical method for applying these concepts into a writing classroom designed for ESL graduate students. It is a method that can be used in any writing program to teach both international and domestic students.

**Keywords:** Academic Writing, Teaching Writing, Rhetorical Genre Studies, English For Specific Purposes, Second Language Learners, ESL Students, International Students, Higher Education, Adult Learners

Adaptation to academic writing is a relatively understudied area. The majority of work tends to focus on American post-secondary students, and little has been done on the experience of international students as they try to enculturate to Western academic writing.

What the research tells us is that academic writing is difficult for both domestic and international students (Badenhorst, Moloney, Rosales, Dyer & Ru, 2015; Bawarshi & Reiff, 2010; Bawarshi, 2016; Gonzales, 2015; Prior, 2006; Vygotsky, 1987). For international students, the difficulty is compounded by language barriers, and a lack of western genre knowledge and awareness (Bawarshi, 2016; Gonzales, 2015; Park, 2016; Singh, 2017; Shang-Butler, 2015).

So as educators in higher education (HE) that is increasingly being dominated by international students, what can we do about it? The following article is a literature review of research indicating the difficulty international and domestic students experience with academic writing, followed by theoretical solutions, and pedagogical applications.

The first section will focus on the problems that post-secondary students face when attempting to learn academic writing. The second section will look at Rhetorical Genre Studies (RGS) as a theory supporting post-

secondary writing (Artemeva, 2004; Bawarshi & Reiff, 2010) and this includes English for Specific Purposes (ESP). Finally, I will conclude with a curriculum design for teaching writing based on the research.

### The Problems

The famous educational theorist, Lev Vygotsky (1987) explained that writing is one of the most complex formats for humans to learn. He wrote, "Even the most minimal development of written speech requires a high degree of abstraction...the result is that psychological conditions characteristic of written speech are very different from those of oral speech" (p. 202). Similarly, Gonzales (2015) explains the difficulty students face navigating academic writing. She discovered in her research that both native speakers of English and second language speakers of English find academic writing to be a complex process. The difficulty students' encounter is getting the thoughts from their heads onto paper, and both groups described this as being a very linear process (p. 9). The international students, on the other hand, found expressing ideas to be different in their countries, and this adaptation to genre was most challenging (p.9). There is cognitive evidence indicating that language speakers think differently according to their language of origin. For example, Boroditsky, Fuhrman, & McCormick (2011) found that Mandarin speakers think about time vertically, while English speakers think about time horizontally, and this demonstrates how language shapes thought. If we fail to take into consideration the ways that other language speakers develop their ideas, then we are not giving them the best chance for success. Bawarshi (2016) explains that the problem with teaching genre as rule-bound, and fixed is that it has the potential to exclude. He writes, "We need to extend genre agency to include knowledge of strategic genre performances in space and time, within asymmetrical relations of power" (p. 246). In addition, Prior (2006) explains that writing is a social process. Using the sociocultural theory of writing as a lens, he examines the ways that writing creates systems of power. He writes, "Sociocultural theory argues for viewing writing as a mode of social action, not simply as a means of communication. Writing participates in making particular kinds of people, institutions and cultures, as well as indexing them" (p.58). Therefore, as both international students and domestic students learn more about academic writing, and how to write well, they gain access to these systems of power. The problem is that not many university instructors know how to teach writing.

According to Badenhorst et al. (2015), graduate student research writing is a "problem" that universities attempt to "fix" by putting the blame on individual students. Faculty departments assume that skills-based solutions such as "add-on writing courses, once-off thesis writing workshops, and the odd how-to programme" (p.2) will aid graduate students and counter their writing deficits. The authors feel that these skills-based solutions are inadequate. They write, "It is more difficult to get sustained, disciplinary-embedded writing pedagogies that allow graduate students to negotiate academic literacies over time" (p. 2). Badenhorst et al. (2015) explain that most instructors and supervisors do not know how to teach academic writing. They state, "Supervisors often do not know how to teach writing and they find it difficult to articulate many fluid discursive practices which remain hidden and tacit" (p. 3). So the authors identify three key areas students need to master in order to become fully competent researchers and writers. According to Badenhorst et al. (2015) successful researchers and writers graduate students need to "(1) become discourse analysts; (2) develop authorial voice and identity; and (3) acquire critical competence" (p.9-10). Their solution is teaching a writing course to emphasize these three important skills over an entire semester. The results indicate that international and domestic students become better writers as a result of their course. In terms of international students, Park, (2016); Singh, (2017); Shang-Butler, (2015) examine the difficulties these students in particular face.

In his interview of 70 ESL speakers at an English speaking university in Malaysia, Singh (2017) found that the graduate students experienced extreme difficulty navigating academic writing tasks. Based on the results of the interviews, he makes the following recommendations in order to support international student writing (p. 638):

- Designing writing programs
- The importance of constructive feedback from instructors
- Scaffolding assisted learning

- The need for lecturers to make clearer expectations, and to try to empathize with the challenges faced by the students

In addition, Park (2016) interviewed 35 international university students in the U.S. and found that although the majority of students felt that they had acclimatized to the host environment, adjusting to academic writing culture was most difficult. The conclusion indicates that confidence in English language ability also translates into academic writing confidence. Problems arise when there are: “mismatched expectations, (and) language barriers” (p. 900). Park suggests that researchers need to look more closely at how international graduate students “attempt to acquire English to be smoothly acculturated in the U.S. university” (p. 900).

Similarly, Shang-Butler (2015) found that mainland Chinese students experience great difficulty learning western academic writing. Her reason for the study is due to the fact that mainland China students have been underrepresented in previous studies even though their economic contribution to U.S. universities has been profound. In addition, she found that their cultural ways of writing differ greatly from American ones. Shang-Butler writes, “EAL users from different social, cultural, linguistic and socio economic backgrounds often find their ways of writing do not necessarily match the practices of the American academic culture” (p.7). She points out that rather than focusing on writing product, writing process is much more important to study in order to teach mainland Chinese students’ academic writing (p. 173). In sum, research shows that international students studying in western universities find academic writing to be the most difficult task they encounter in the enculturation process. Because acclimatizing to the social nature of academia is both a personal and social process, Rhetorical Genre Studies and English for Specific Purposes provide theoretical frameworks that can help instructors design writing programs for both domestic and international students.

### Theoretical Frameworks

Bawarshi and Reiff (2010) explain in their book how to best apply the theory of Rhetorical Genre Studies (RGS) with pedagogy. RGS is a branch of composition studies that is grounded in the belief that writing is a social process. The social aspects of writing, known as the ‘social view’ (p. 5) dominated rhetorical studies in the 1980’s and were researched by Cooper (1989), Freedman & Medway (1994). In addition, the sociocultural aspect of writing can be defined as follows: “The central questions for research grounded in the social perspective are those that concern the contexts in which texts are created. This rhetorical context view emphasizes that awareness of audience and purpose influences both what and how a writer writes” (Artemeva, 2004, p.5). Bawarshi and Reiff (2010) dedicate chapters four and ten in their book about how best to teach writing to second language learners using RGS and ESP as theoretical frameworks. Chapter four is entitled “Genre in Linguistic Traditions: English for Specific Purposes,” and chapter eleven is, “Rhetorical Genre Studies: Approaches to Teaching Writing.” I will begin by describing chapter four.

Bawarshi and Reiff (2010) show how Swales’ book *Genre Analysis: English in Academic and Research Settings* helped to connect the ideas of English for Specific Purposes (ESP) and genre analysis (p. 41). In addition, the change of study to ESP (that focused on genre analysis) from corpus linguistics, aided in bridging RGS and linguistics. Most importantly, ESP differs from systemic functional linguistics (SFL) in that ESP methods are used with more economically advanced populations who can afford to study in developed nations at the graduate level, while SFL is targeted at empowering those populations who lack access to education generally, and come from economically deprived countries, or neighbourhoods. Bawarshi and Reiff, quote Swales when explaining that both SFL and ESP aim to “demystify the kinds of writing that will enhance learners’ career opportunities and provide access to a greater range of life choices” (p.43). Furthermore, they indicate that Swales’ definition of “Discourse Communities” as “sociorhetorical networks that form in order to work towards sets of common goals” (p. 44) helped elucidate the sociocultural implications of genre pedagogy. Most helpful is the inclusion of Vijay Bhatia’s “seven steps to analyzing genres” (p. 47) which are:

1. Situating the genre-text in its context
2. Survey existing research on the genre
3. Identify who uses the genre and who the audience is

4. Collect a “corpus” of the genre
5. Perform an institutional ethnography to find out who uses the genre, and how, and why
6. What are the linguistic features of the genre
7. Have a person who specializes in the genre format confirm the findings in steps 1-6.

In conclusion, this chapter is important not only in that it helps guide instructors in teaching international ESL students, but also for institutions reliant on international students to fund their programs who want to learn how to better teach writing to these students.

Next, I will assess chapter eleven. This chapter accomplishes several tasks (p. 189) such as:

- How to build genre awareness that can be used in a multitude of writing situations
- How to build a “critical awareness” of genre
- How to teach students to evolve from critique writing to other genres
- How to position genres according to their sociocultural uses.

Most importantly, Bawarshi and Reiff (2010) explain how to teach genre analysis using the RGS approach. They write,

In the RGS approach to teaching genre analysis, students learn how to recognize genres as rhetorical responses to and reflections of the situations in which they are used; furthermore, students learn how to use genre analysis to participate and intervene in situations they encounter (p. 192).

In summary, this chapter is very useful in how to instruct the teaching of genre in writing to international students. It is also very useful for those instructors who are not interested solely in the linguistic features of speech, but rather the sociocultural and sociohistorical contexts from which writing genres have arisen, and continue to develop.

### **Implications for Teaching Writing in HE**

As we continue to improve our writing programs in HE in order to support increasing international student populations, there are some steps that we can take to ensure that we are giving our students the best chance to succeed. As research shows, domestic students also find academic writing difficult, and require assistance.

Instructors wonder where to begin when they teach writing, and Harris (2006) explains that she begins her classes by teaching students how to write abstracts, and then moves into critiques. Although her reasoning for this scaffolding is subject specific, I believe that this allows students to differentiate between “Objective” and “Subjective” writing. If students are able to recognize that summary writing, and abstract writing are objective forms of writing requiring a close reading of the text, they can understand the moment when they are expected to give an opinion, and when they are not. For example, Shang-Butler (2015) explains that there are nine types of academic writing (p.6), which she takes from Hale et al. (1996):

- Essays (**Subjective**)
- Research papers (**Objective** and **Subjective**)
- Short tasks of less than half a page (**Objective** or **Subjective**)
- Reports or experiments (**Objective**)/observations with interpretation (**Subjective**)
- Summaries (**Objective**)
- Case studies (**Subjective**)
- Plans/proposals (**Subjective**)
- Documented computer programs (**Objective**)
- Book reviews (**Subjective**)

If we take these nine types of writing and add annotated bibliographies and literature reviews in order to accommodate graduate-level writing tasks, then we can see some themes emerging. About half of the tasks are

objective writing assignments, while the other half are subjective. By 'subjective,' it means that students are required to give their opinion on a topic. I find that most international students do not understand where, or when they should add their opinion, and so if I break it down into steps for them, it helps them learn. Also, students can't form an opinion until they have read, and fully understood the text. I teach Annotated Bibliographies as objective forms of writing, and students learn how to write Informative Abstracts as their bibliographic annotations. This helps them find the purpose, methods, results, conclusions, and implications for future research in each article they read. This teaches them to read for specific purposes, but also to write objectively about the research. Conversely, literature reviews are taught as subjective writing where students learn to critique each article, and assess its strengths and weaknesses. The literature review then becomes an essay that explores common themes in a series of articles that have been critiqued.

As a result of my experience scaffolding graduate writing tasks to international students, I created the "Graduate Cycle of Academic Writing" (Appendix 1) for teaching a Graduate Preparation ESL course designed for international students entering a Master's program (Appendix 1).

In addition I have come up with a step-by-step plan for teaching genre based on my own experience teaching international students, and taking into consideration the suggestions of Bawarshi (2016); Bawarshi and Reiff (2010); Harris (2006); Gonzales (2015); and Prior (2006):

1. Articulate the "WHO, WHAT, WHEN, WHERE, WHY, and HOW of the genre you are teaching.
2. Have former students who are now in their graduate programs, and professors from other disciplines come into the classroom to confirm genre-specific guidelines.
3. Provide clear assignment criteria in a hand-out or on an online learning platform that addresses word count, font size, line-spacing and assignment parameters. Provide a grading rubric at the same time.
4. Make available sample assignments, templates and language prompts specific to the genre. Incorporate a Citation style presentation early on in the semester.
5. Have students create group posters to affirm their learning of the genre.
6. Organize your classes to make time for weekly personal writing interviews with each student. Ask them if the writing assignment is similar in their country and if they have ever done it before.
7. Make a list for each student of repeated grammatical errors and host workshops based on those errors (For example, fragmented and run-on sentences).
8. Start with objective writing tasks (summaries) and move to subjective tasks (critique writing).
9. Reinforce writing tasks by having speaking presentations based on writing assignments. For example, in preparation for the literature review, which requires students to organize their annotated bibliography references into themes and critique them, I have students present on the themes in their annotated bibliography with a PP presentation. They are only allowed 3 words per slide in order to encourage a smooth explanation with a focus on speaking assessment.
10. Remember: We are not only teaching our students a new language. We are teaching them how to think in that language.

## Conclusion

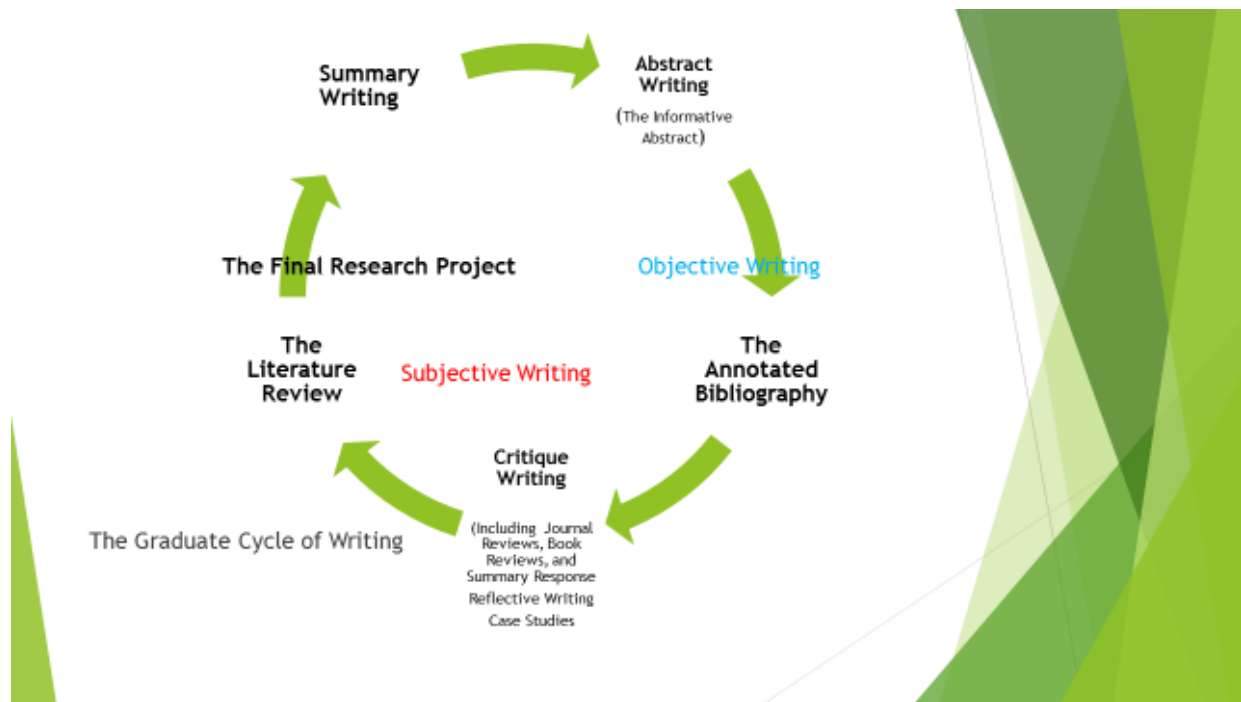
Research shows that both domestic and international students struggle with writing although international students are additionally burdened with language barriers and unfamiliarity with western writing genres (Badenhorst, Moloney, Rosales, Dyer & Ru, 2015; Bawarshi, 2016; Gonzales, 2015; Park, 2016; Singh, 2017; Shang-Butler, 2015). Although most academic writing assignments are the same as they used to be such as literature reviews and research proposals, academic writing is changing rapidly in an increasingly globalized world. This can be exemplified by newer assignments such as "Reflective Writing" and "Case Studies" that are showing up as composition assignments. In addition, populations are transforming as international, transnational, and techno-literate adults fill post-secondary classrooms. ESP can be used in combination with RGS for second language learners and native English speakers. These theoretical frameworks help to scaffold students to the social nature of writing by guiding them in how to respond purposefully to different audiences, and for different purposes. Students need to understand both objective and subjective writing tasks. By scaffolding writing assignments, making clear assignment criteria, and following the above steps, HE

instructors can help both international and domestic students better navigate the complex task of academic writing.

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**Appendix 1: The Graduate Cycle of Writing**





# The Language Proficiency and Process Skills of Filipino High School Teachers

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## Abstract

This study employed the Test of English Proficiency for Teachers-Process Skills Test (TEPT-PST) results of Grades 7-10 Science and Math public high school teachers in the Philippines. Qualitative and quantitative designs were applied, along with secondary data, to analyze the subtests in the teacher assessment consisting of Structure, Written Expression, Reading Comprehension, and Process Skills. Findings show that teachers are proficient in reading comprehension items but find difficulty in expressing themselves in written form. Analyses of the competencies show that assessed teachers performed poorly in using articles and noun forms, decoding meaning from a word, and inferring. Lastly, the implications in the teaching-learning process were discussed to provide recommendations based on the evidences.

**Keywords:** Language Proficiency, Process Skills, High School Teachers

## Introduction

Teaching has always been regarded as a noble profession; one that creates all the other professions, as they say. Today's society demands that teachers' functions must have an impact in the lives of their students and the society. It is undeniable that the teachers' role is critical in improving student achievement. Notable features of teacher preparation programs consistently related to student outcomes were explored by Boyd et al. (2009) consisting of focused on classroom work, opportunities for immersion in actual teaching practices, and review of the curriculum. Preparing teachers for a career in the academe is tedious work and must be established in in-service training. Pre-service teacher training requires planning for professional growth and development of positive teacher attributes, while in-service training is aimed at the improvement of current teaching practices towards professional competence (Rahman, et al., 2011). Learning is a perennial aspect in the life of a teacher. The absence of continuous growth of a teacher hampers student achievement. Archer (1998) and Haycock (1998) reported the disturbing evidences of teacher ineffectiveness.



With the clamor for increased teacher quality, teaching has substantially developed multi-faceted standards considering the one-year approved DepEd Order 42, s. 2017 mentions the education sector's adoption of the Philippine Professional Standards for Teachers (PPST) which reiterate that quality is at the forefront of teaching. The PPST's implementation was based on nationally-based validation of teacher standards across career stages. Similarly, a plethora of studies have explored teacher quality in terms of teacher preparation, educational qualifications, years of teaching experience, teacher assessment, classroom observation scores, and most recently—value-added models (VAM).

In understanding teacher effectiveness, evaluative tests are employed as central factors in analyzing teacher quality as observed in the classroom. Teaching constitutes more than just mastery of the subject matter but reflects on what actually skills identify effective teaching. In providing quality education to students, assessment emphasizes the linkage between teacher dimensions and actual teaching practices. However, assessment is one misunderstood aspect in the field of education. High-stakes teacher assessment defeats the real objective of looking into indicators that work or hampers student learning. Measuring teacher effectiveness based on teacher assessment results to derive analysis provides policymakers and educational stakeholders a systemic scope. Research literature emphasizes that certain teacher attributes in teacher assessment can provide a more detailed lens of the teaching-learning process (Wayne & Youngs, 2003; Bacher-Hicks et al., 2015; Kane et al., 2013; Kane & Staiger, 2008; Glazerman & Protik, 2015). These studies provide consistent results on the impact of teacher effectiveness on students' current achievement. Further experimental research on this research frame are continuously being done to validate its occurrence, particularly in value-added models (VAM) for teacher assessment.

Despite the extent of review and literature analyzing the effects of teacher assessment on student achievement, conclusive findings are not yet fully established in probing teacher indicators that affect student scores on achievement tests.

### *Teacher Effectiveness*

The terms *teacher quality* and *teacher effectiveness* are used interchangeably in several studies. In most contexts, teacher quality is a critical component for placement and career pathing but is highly debated due to the measures by which it is assessed. Standards are internationally employed as the backbone of teacher quality, described as "of utmost importance for long-term and sustainable nation-building" (Philippine Professional Standards for Teachers). It is also acknowledged in these new teaching standards that high-quality teachers who were prepared and trained properly are capable in meeting the demands of a K to 12 teacher. This is in consonance with Boyd's, et al. (2009) study which posited that immersion in actual teaching practice and provision of oversight programs on the teaching profession allows more opportunities for pre-service teachers to increase student gains during their initial teaching year.

*Teacher effectiveness*, on the other hand, constitutes a broader umbrella of definitions and one dimension of this is teacher evaluation. Weisberg, Sexton, Mulhern, & Keeling (2009) exposed the harsh reality of teaching as depicted in their findings that in a sample of 15, 000 participants, low-performing teachers are overlooked, and high-performing teachers seem to be unrecognized. Popularly known as the *widget effect*, this is traced to the instructional leaders' equal manner of rating teachers and is similar to an actual "widget" application which can be re-aligned depending on the wants of the user. This is symptomatic of the idea that teachers perform in a standardized manner regardless of qualifications, years of experience, performance, among others. Central to this idea is the lack of careful considerations on what teachers really deliver in the classroom, and likewise, this may result to minimal feedback and teacher quality.

In a study conducted by the National Education Testing and Research Center (NETRC, 2002) regarding teacher effectiveness, indicators abstracted from UP-NISMED (2002) are as follows: academic preparation, positive behavioral manifestations, good command of the medium of instruction, research-driven, and mastery of the subject matter they teach.

## Language Proficiency

Hanushek's (1971) seminal work on teacher characteristics that affect student gains revealed that verbal ability tests have two-fold functions: gauge of communication skills and initial measure of general ability. It also provided several interesting findings about teacher quality in terms of verbal ability which contributes to increased student academic performance (Hanushek, 1971, cited in Fong-yee & Normore, 2013). Despite formal training on teaching, good command of the medium of instruction is important in teacher quality. Empirical studies show that high-performing teachers on verbal ability tests significantly impact student learning gains that their low-performing counterparts. Similar to any theoretical standpoints, teachers' verbal ability tests are also subjected to mixed findings. In examining teachers' verbal ability using the Graduate Research Examination-Verbal (GRE-V), Andrew, Cobb & Giampietro (2005) found that there is no conclusive relationship between the verbal abilities of teachers and their teaching ability. The study's primary consideration relied on the small sample of undergraduate education students, but other findings that the lowest performers have the weakest verbal ability scores are in consonance with the following research:

Research Base	Findings
Strauss & Sawyer (1986); Rowan, Chiang, & Miller (1997); Rotherman & Mead (2003)	Students who were taught by teachers with strong verbal abilities do better in standardized tests than students taught by teachers with poor verbal abilities.
Greenwald, Hedges, and Laine (1996)	Teacher ability positively effects student achievement and school resources with student achievement.
Heck (2009)	The effectiveness of teachers (collective teacher effectiveness and stability of school staff and institutional quality) is positively related to student achievement in reading and math.
Sehgal, Nambudiri & Mishra (2017)	There is a positive correlation between teacher self-efficacy and dimensions of teacher effectiveness in the delivery subject matter, facilitation of learning, and regulation of student learning.

### TEPT-PST (Teacher Effectiveness Indicators)

In defining language proficiency, several references have to be consulted in order to avoid polarized contexts. In order to ascertain its definition, this terminology will be adapted from Cummins (1984) definition whereby "*language proficiency*" for test language refers to the language performance of students in response to a test situation. The language participants referred to in the TEPT-PST would have to be the Science, Math, and English teachers in the sample of public school teachers.

This study seeks to establish certain connections of high-performing teachers with student learning gains by analyzing the results of the Test of English Proficiency for Teachers-Process Skills Test (TEPT-PST).

The Test of English Proficiency for Teachers-Process Skills Test (TEPT-PST) is a multiple-choice assessment primarily conducted to provide baseline information on the training needs of public school teachers in the country. The covers ninety (90) items of subtests in:

**a. Structure**

This fifteen (15) item subtest measures how grammatical components are correctly used in sentences and in contexts.

**b. Written Expression**

This twenty-five (25) subtest measures teachers' ability to compose their thoughts and ideas in written form.

**c. Reading Comprehension**

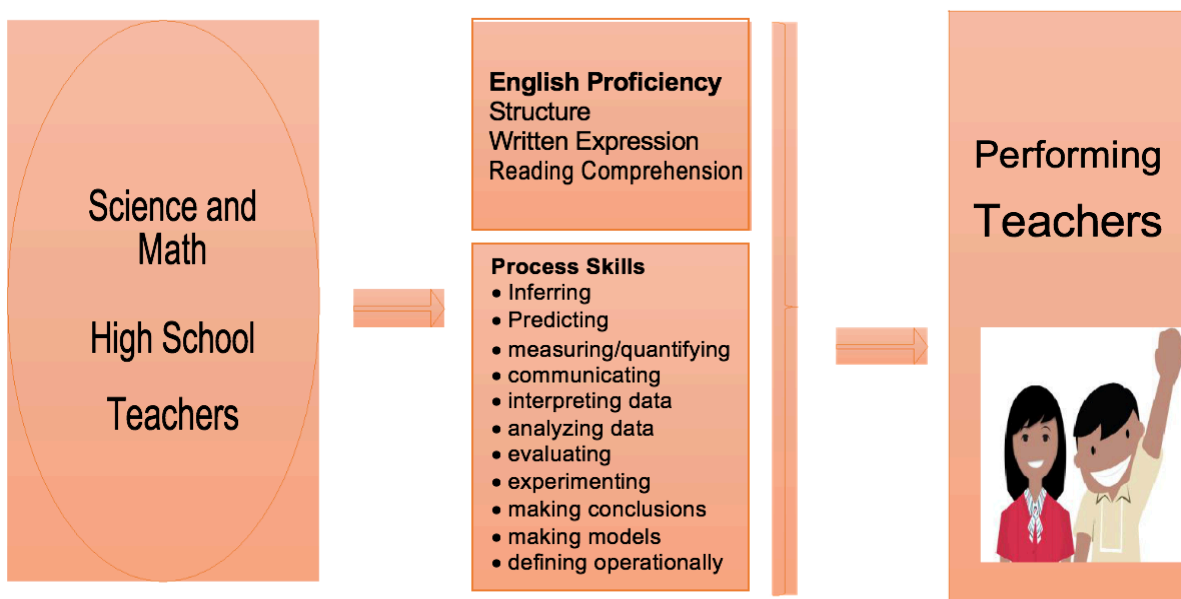
This fifty (50) item subtest assesses the ability of teachers to use their analytical, interpretative, and critical reading skills as they read text materials/excerpts in order to provide concrete generalizations and conclusions.

**Process Skills Test (PST)**

In understanding how process skills are employed in the classroom, Irwanto, et al. (2017) describes that Science teachers play a critical function in enhancing their students' thinking activities through scientific learning. Correspondingly, this is relatively acquired through master of scientific knowledge in analyzing, assessing, evaluating, comparing, and contrasting abstract concepts. It was maintained that science process skills are cognitive and psychomotor skills employed in authentic classroom contexts in the thirteen (13) process skills in the TEPT, namely: "inferring, predicting, measuring/quantifying, communicating, interpreting data, analyzing data, evaluating, experimenting, making conclusions, making models and defining operationally".

Mathematical process skills, according to Scusa (2008), are reflected in the key traits of a mathematical thinker in communicating, representing, reasoning and proving, problem-solving, and connecting learning. It was found in the study that meaning-making contexts allow one to think and understand mathematically.

The PST is the second part of teacher assessment which measures the subject matter-based knowledge of Science and Math teachers. It consists of forty items with thirteen (13) process skills.

**Research Paradigm**

To illustrate the concept of teacher effectiveness as reflected in the above research paradigm, variables that are taken into account are the English proficiency and process skills of Science and Math teachers. Assessing teachers through the TEPT-PST provides an evaluative measure of the competencies which teachers know. The

aspects which are being looked into are structure, written expression, and reading comprehension under the TEPT test and process skills which contribute to teacher effectiveness as an aspect of quality. In understanding how teachers perform in the TEPT-PST, teaching gaps are analyzed to provide recommendations that lead to high-quality teachers. The language component in the DepED-standardized teacher test provides an overview of teachers' knowledge of language functions while the process skills aspect delivers results of critical Science and Math skills that teachers know and use in situational contexts.

### **Research Questions**

This study aimed to look at teacher effectiveness using the 2016 TEPT-PST results of Grades 7-10 Science and Math teachers. Specifically, it aims to address the following research questions:

1. What are the levels of proficiency of Grades 7-10 teachers in the TEPT-PST subtests?
2. What are the significant differences between the performance of Grades 7 & 8 teachers with Grades 9 & 10 teachers in the TEPT-PST?

### **Limitations of the study**

Utilizing teacher assessment scores as measures for teacher effectiveness is a longstanding form of probing the quality of teachers in an education system. The debatable topic is accountability, as to whether system assessment can impact outcomes at the grassroots' level, is seemingly unexplorable in this study. Factors such as teacher core competencies and teacher performance for school effectiveness are beyond the scope of this paper. In this regard, a more comprehensive study has to be conducted in order to generate more generalizable statements regarding the relationship of teacher effectiveness and student learning gains. Crooks (1988) maintained that use of student assessment may be practical for the teacher's individual development but can be highly unreliable for bureaucratic purposes.

### **Methodology**

#### **Research design**

This study utilized qualitative-quantitative designs in probing the proficiency levels and competencies of the sampled Grades 7-10 junior high school teachers who took the Test of English Proficiency for Teachers-Process Skills Test (TEPT-PST), a nationally-conducted evaluative assessment for public school teachers. The primary objective of the assessment is to look at the competencies of teachers that may serve as evidences for teachers' in-service training and professional development. The conduct of the TEPT-PST is done in two grade levels and school year. For instance, Grades 7 and 8 teachers were assessed in 2016, and Grades 9 & 10 teachers took the tests in 2017.

The dissemination of the results for the TEPT-PST is given through an individual certificate of rating (COR), and as such, the data utilized for the purpose of this study were analyzed singularly. Results are provided to regions and divisions through school classification, and performance, and data for this study was extracted from the database.

#### **Sampling Procedure**

In the conduct of this study, secondary data analysis was utilized in the analysis of TEPT-PST results of Grades 7-10 teachers. DepEd Memorandum 127, s. 2016 stipulates that *all* permanent public school Science and Math teachers will take the tests. These include out-of-field teachers regardless of teacher position and length of service.

Level of Proficiency	
90% - 100%	Highly Proficient
75% - 89%	Proficient
50% - 74%	Nearly Proficient
25% - 49%	Low Proficient
0% - 24%	Not Proficient

### Statistical Treatment

In processing and analyzing the data in this study, the following statistical treatment was applied in SPSS version 22:

- a. Mean -to determine the average of the scores in each subtests and overall percentage scores
- b. Standard deviation –to analyze the spread of scores of the TEPT-PST takers

Standard error- to validate the effect size in the t-test

### Results and Discussion

#### Presentation, Analysis, and Interpretation of Data

This section discusses the findings of the sampled Science and Math teachers' performance in the 2016 and 2017 Test of English Proficiency for Teachers- Process Skills Test (TEPT-PST) of all public Science and Math high school teachers. The inclusion process for the sample is based on the criteria provided by the Department of Education-Bureau of Education Assessment's (DepEd-BEA) criteria, formerly the National Education Testing and Research Center (NETRC) as disseminated in a department order. The TEPT-PST is conducted in batches and grade and year level. For 2016, Grades 7 and 8 teachers took the tests while Grades 9 and 10 teachers were assessed in 2017.

The initial part of the results shows the overall mean percentage scores of the teachers and scores per subtests of the TEPT-PST. To show the significant differences between the performance of Grades 7 and 8 teachers with their Grades 9 and 10 counterparts, the last section provides a discussion on subtests and competencies that may hinder or improve the teaching effectiveness of Science and Math teachers.

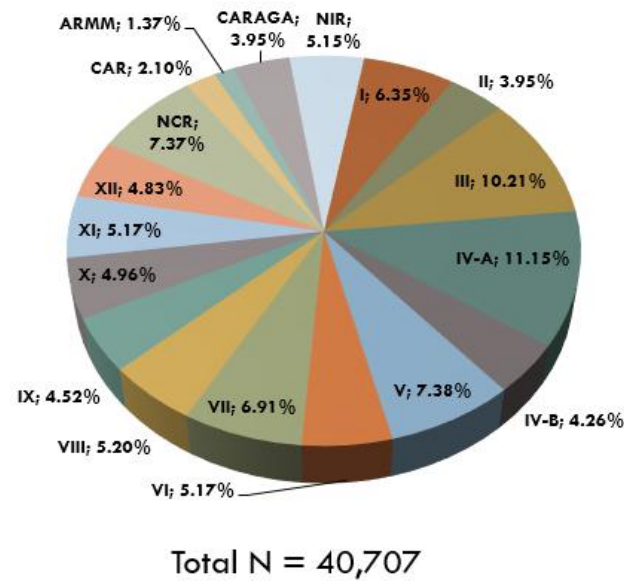


Figure 1. Percentage distribution of Grades 7 and 8 TEPT-PST Takers across regions

Figure 1 shows the percentage distribution of Grades 7 and 8 teachers who took the TEPT-PST in 2016. The highest representatives of teachers come from IV-A, III, V, NCR, VII, I, XI and NIR\*, respectively. There was a total of **40,707** Grades 7 & 8 test-takers.

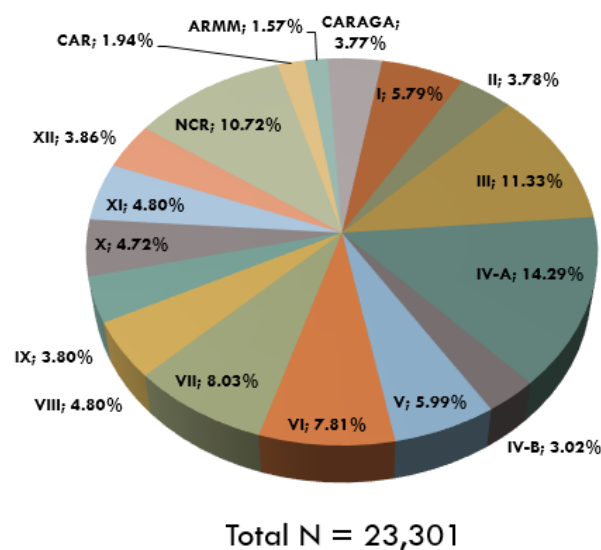


Figure 2. Percentage distribution of Grades 9 and 10 TEPT-PST Takers across regions

Figure 2 shows the percentage distribution of Grades 9 and 10 teachers who took the TEPT- PST in 2016. The highest representatives of teachers come from IV-A, III, and NCR, respectively.

There was a total of total of 23,301 Grades 9 & 10 test-takers.

\* The Negros Island Region (NIR) was established as an administrative region and the 18<sup>th</sup> region of the Philippines. It existed from May 29, 2015, to August 9, 2017; thus covering the time frame of this study's data gathering. It was revoked by President Duterte under Executive Order No. 38 due to lack of funding

Table 1. Overall TEPT-PST Scores of Grades 7 & 8 Teachers

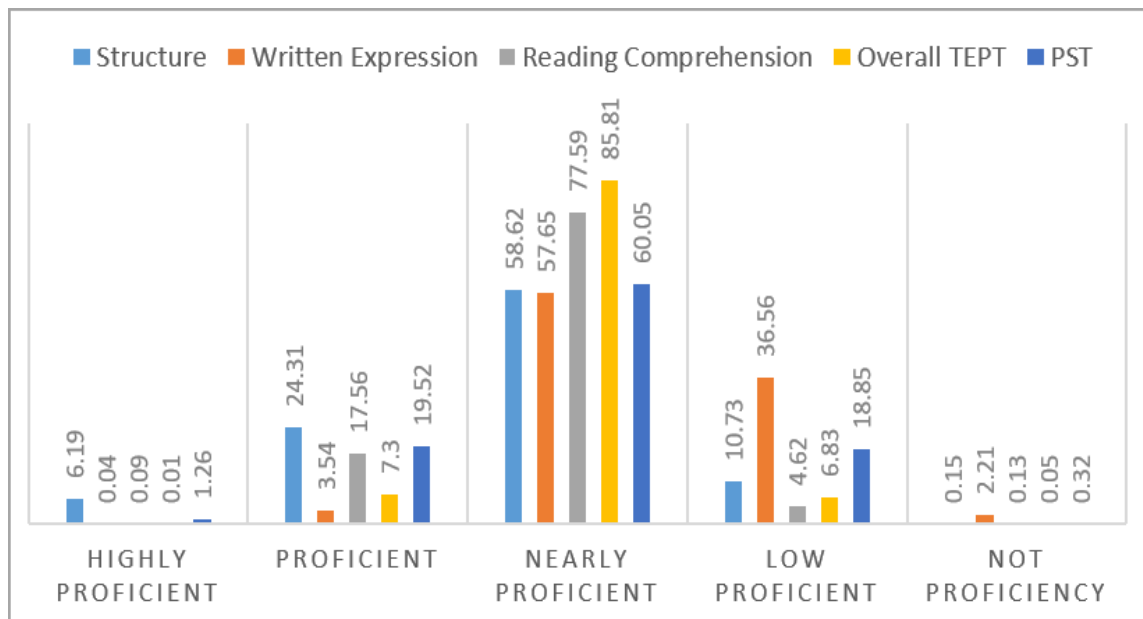


Table 1 shows the overall TEPT-PST scores of Grades 7 & 8 teachers in all subtests. It can be gleaned from the data that the majority of the scores fall under near proficient levels. For each subtest, assessed teachers gained high scores in Reading Comprehension and scored low in Written Expression.

Table 2. Overall TEPT-PST Scores of Grades 9 & 10 Teachers

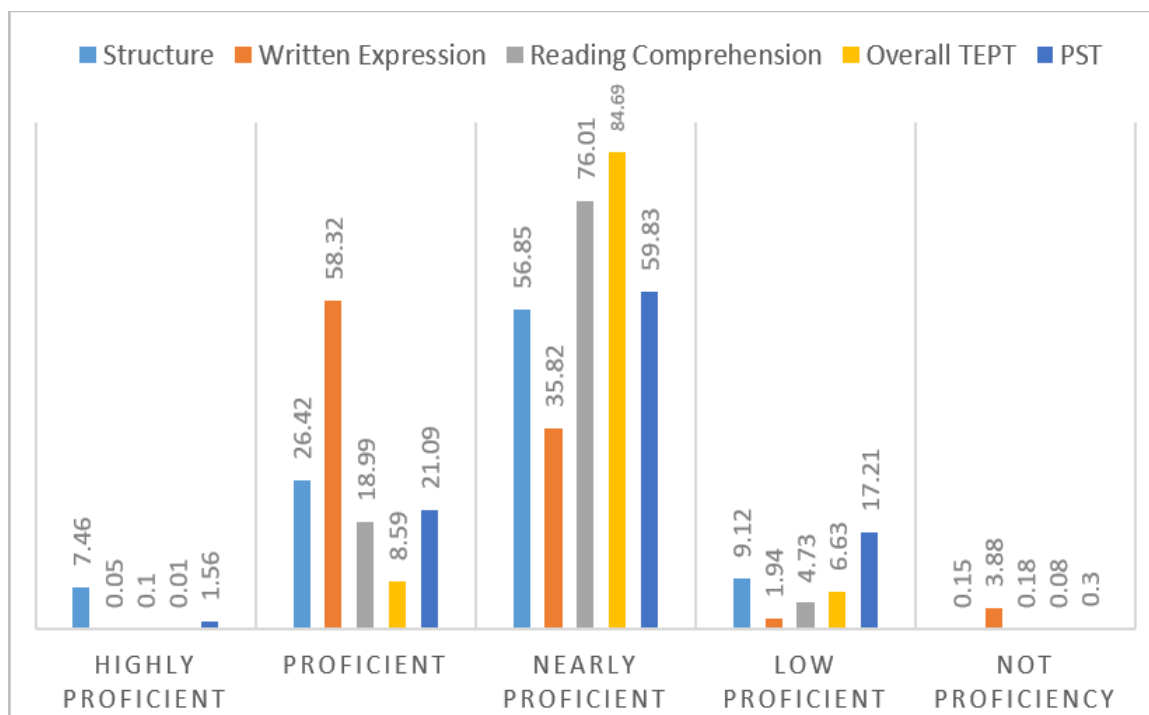
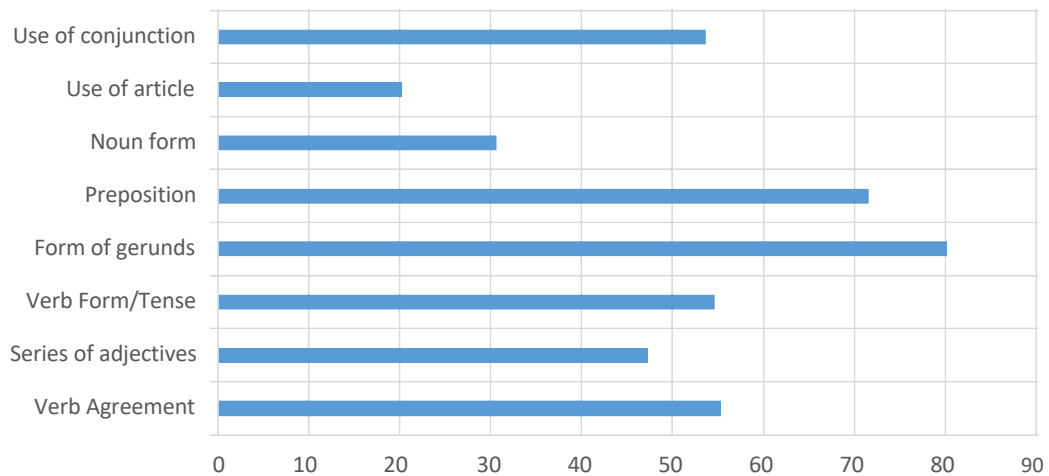


Table 2 presents the Overall TEPT-PST scores of Grades 9 & 10 teachers. The data reveal that assessed teachers gained nearly proficient level. For the subtests, teachers gained highest scores in Reading Comprehension (nearly proficient) and proficient level in Written Expression.

Table 3. TEPT-PST for Grade 7 and 8  
Percentage of Correct Response in Written Expression



As can be gleaned from Table 3, Grades 7 and 8 teachers gained the highest scores in forming gerunds (80%) and lowest scores in the use of articles (20%) for the Written Expression subtest. Apart from article usage, data also show that teachers of these levels had difficulty in using noun forms (30%).

Table 4. TEPT-PST for Grade 7 and 8  
Percentage of Correct Response in Structure

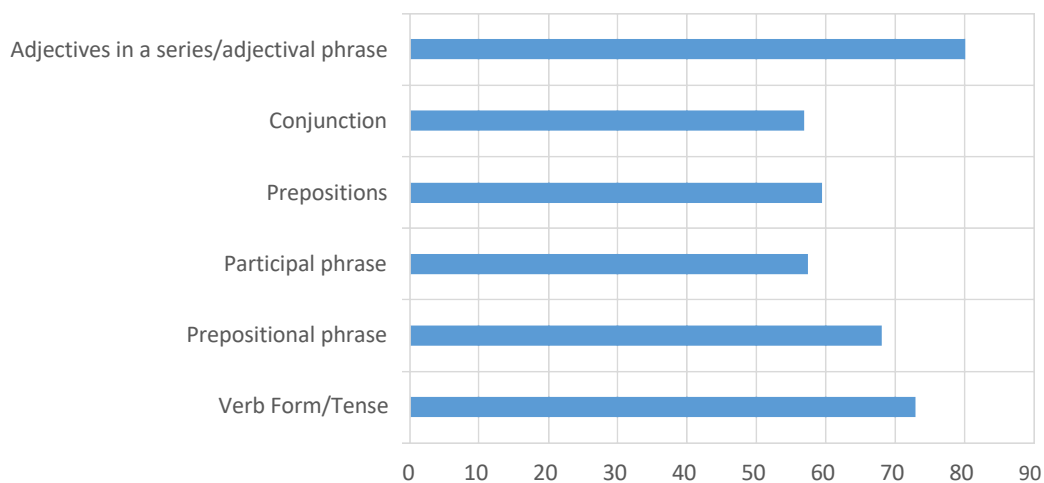


Table 4 indicated the TEPT-PST for Grades 7 & 8 percentage of correct responses for the Structure subtest. Data show that teachers gained the highest PCR for adjectives in a series/adjectival phrases (80%) and the lowest scores for conjunctions (58%).



Table 5. TEPT-PST for Grade 7 and 8  
Percentage of Correct Response in Reading Comprehension

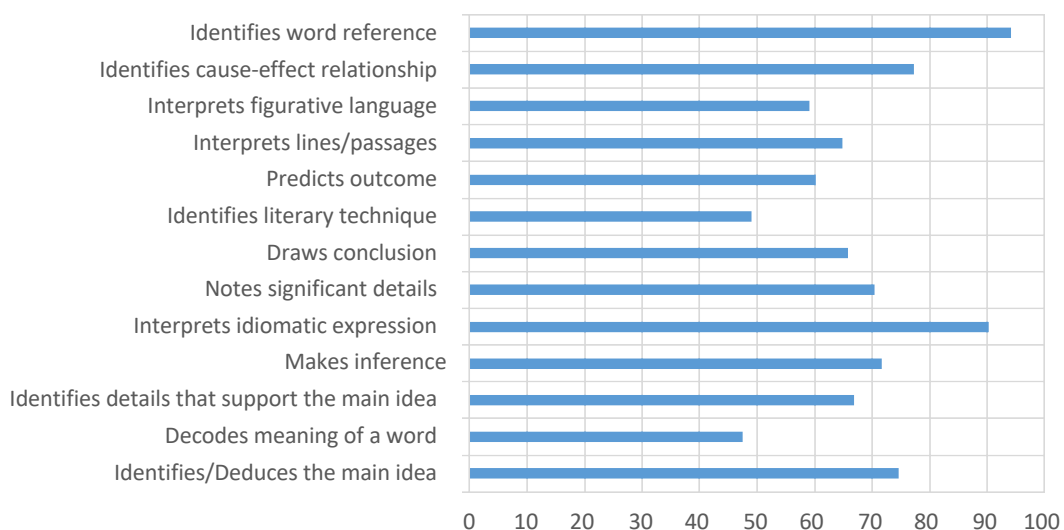


Table 5 presents the TEPT-PST for Grades 7 and 8 Percentage of Correct Response in Reading Comprehension. Analysis of the data point out to the lowest scores of teachers in Decoding meaning of a word (47%) and Identification of literary technique (49%).

Table 6. TEPT-PST for Grade 9 and 10  
Percentage of Correct Response in Structure

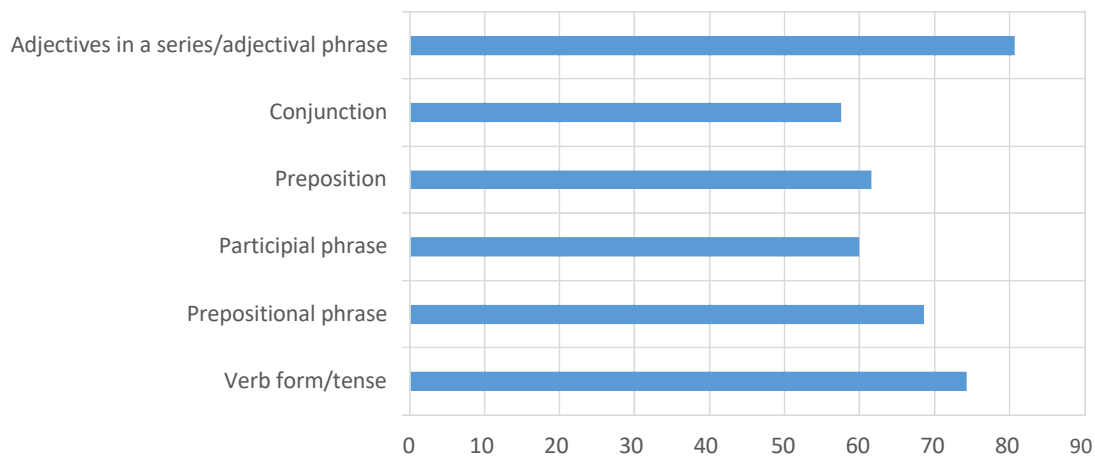


Table 6 indicated the TEPT-PST for Grades 7 & 8 percentage of correct responses for the Structure subtest. Data show that teachers gained the highest PCR for adjectives in a series/adjectival phrases (80%) and the lowest scores for conjunctions (58%).

Table 7. TEPT-PST for Grade 9 and 10  
Percentage of Correct Response in Written Expression

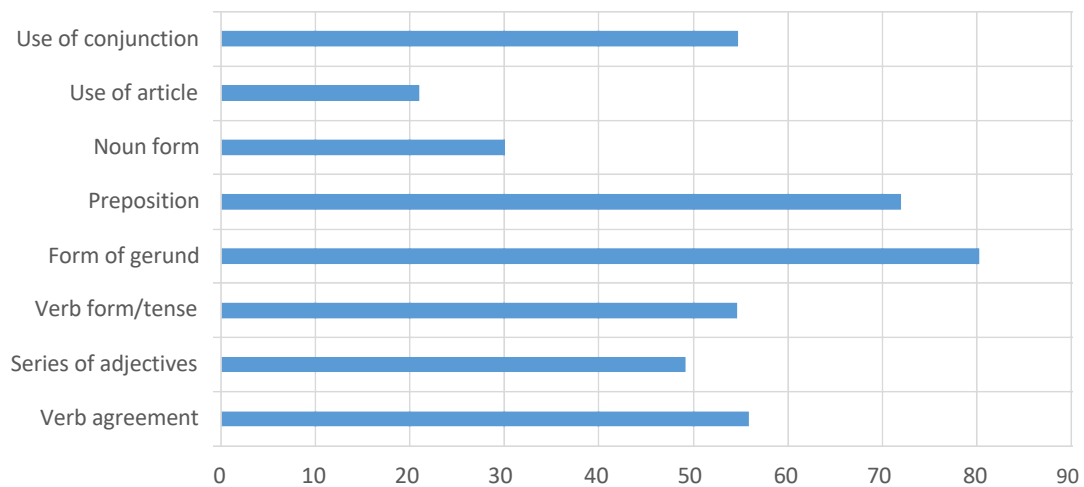


Table 7 presents the percentage of correct response in written expression of Grades 9 and 10 Science and Math teachers. Teachers are reported to perform considerably higher in forming gerunds (80%) and gained lowest scores in the use of articles (22%).

Table 8. TEPT-PST for Grade 9 and 10  
Percentage of Correct Response in Reading Comprehension

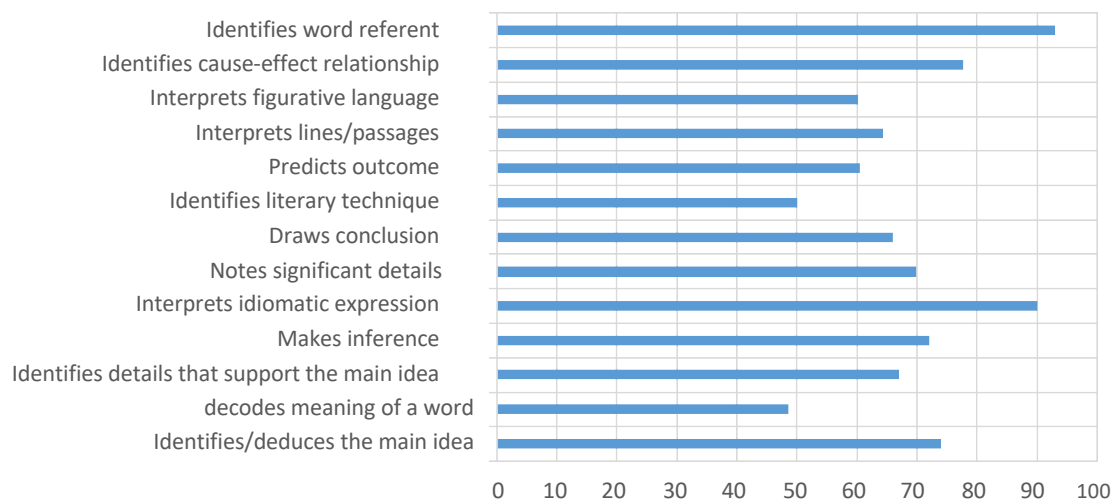


Table 8 shows the percentage of correct responses in reading comprehension of Grades 9 and 10 teachers in Science and Math. Data shows that teachers performed lowest in decoding meaning of a word (48%) and scored highest in identifying word referent (93%).

Table 9. TEPT-PST for Grade 9 and 10  
Percentage of Correct Response in Process Skills

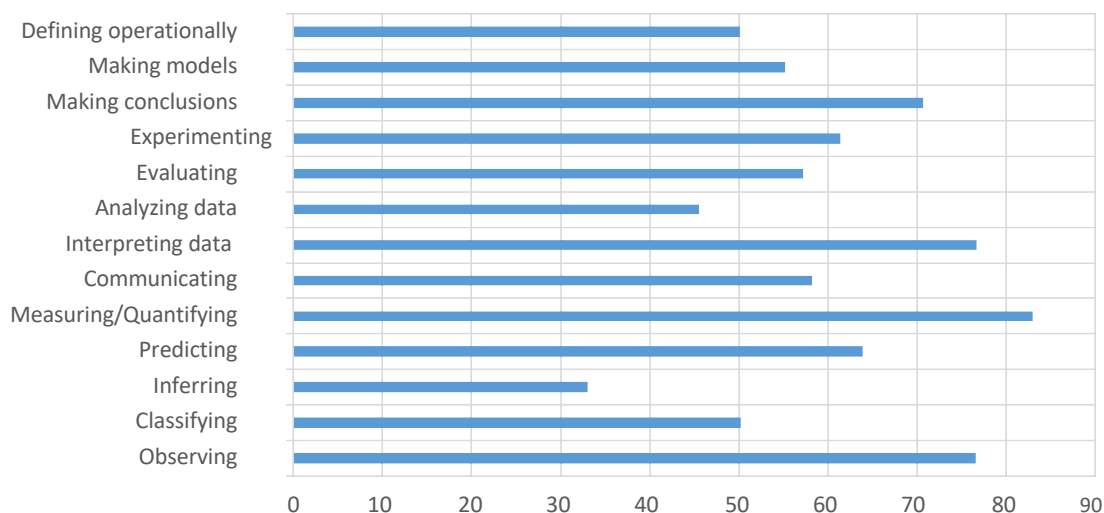


Table 9 presents the percentage of correct response in process skills of assessed teachers. Data reveal that teachers in Grades 9 and 10 perform lowest in inferring (34%) and scored highest in measuring/quantifying (83%).

This study aims to look into the teachers' scores as one measure of teacher effectiveness in the Philippine educational system. The following section discusses the results of the gathered data as regards to levels of proficiency, significant differences between performance of Grades 7-10 teachers and the pedagogical implications of these results in the Philippine education and in the ASEAN contexts.

#### *Levels of proficiency of Grades 7-10 teachers in the TEPT-PST subtests*

Sampled teachers are teachers of core subjects (English, Math, and Science), and it can be deduced that their ability to answer correctly in the TEPT-PST reflects their capabilities as effective teachers. Language plays a major part in a teacher's life. It is the instructional mechanism that makes or break teaching as constituted by language activities such as discussing to facilitate the teaching-learning process. Similarly, teachers who process information using critical thinking skills are more capable of delivering effective and quality teaching in the performance of their duties.

#### *Significant differences between the performance of Grades 7 & 8 teachers with Grades 9 & 10 teachers in the TEPT-PST*

Language facility is a teacher's best competency. Every teacher is expected to engage in communication activities including face-to-face interactions to communicate expectations of the school community members (Briscoe, Arriaza & Henze, 2009; cited in Yusof & Halim, 2014); to elicit relevant knowledge from students; to respond to things that students say; and to describe the classroom experiences that they share with students (Farrell, 2009).

In terms of language proficiency, sampled Grades 7 and 8 teachers— in general— have difficulty identifying parts of speech and using them in contexts (articles, conjunctions). For PST, Grades 7 and 8 teachers find it difficult to decode meaning of words but are proficient in interpreting idiomatic expression. Results show that teachers in the lower high school grade levels find identifying of basic parts of speech as difficult. While these encompass results with Grades 9 and 10 teachers, the ability to use language properly may be problematic in the

delivery of classroom lessons. Teachers need to revisit their foundational language lessons as corrective mechanisms in their usage of the English language.

Grades 7 and 8 teachers gained high scores in interpreting idiomatic expressions. These may be attributed to the context-dependent nature of idioms and are highly embedded in the Filipino culture. Teachers often use idioms in their teaching when they integrate values across subjects.

More often than not, results from standardized tests are not given considerable attention due to sampling issues, among others (Herman & Golan, 1993). But there are stories behind numerical data, despite big or small. Including reliability and validity of data, teacher assessment provides definite answers to some of the most trivial questions about teaching such as questions pertaining to the utilization of results and attributes of high-performing teachers.

#### *Pedagogical implications of teacher assessment scores in relation to teacher effectiveness*

The K to 12 Science and Math education in the Philippines is based on content, contexts, skills and processes, Mathematical tools and values and attitudes. Over the years, Science and Math curricula have amassed a number of challenges that compounded to its current state, including: inadequate and unavailable learning materials, shortage of specialized teachers, and downward trends in student performance in various assessment and survey reports (UNESCO, 2015). The instructional areas of language proficiency and process skills tested in the TEPT-PST provide an outlook of how teachers perform in these aspects.

In the pedagogical context, the job of a modern teacher is not constricted to the concept of knowledge. Besides teaching, modern teachers have several platforms to expose their students to a variety of context-based situations where they can do something about what they know. This is where 21<sup>st</sup> skills are best situated in which language proficiency and process skills align. In gaining low scores in written expression (subtest) and fundamental competencies such as identification of parts of speech and decoding of a meaning of a word, it can be determined that teachers need assistance. More too often, the offered perspectives to the curricula and training approaches that are far-removed from what classroom teachers actually need. It can be logically derived that the assessed Science and Math high school teachers also need intervention activities in delivering instruction. Science and Math are inquiry-based subjects, and they are heavily laden on critical thinking. For instance, in Mathematics, solving word problems with lacking skill in interpretation through written form is a "perceived disconnect between school mathematics and everyday life" (DOST-SEI, 2011). Academic subjects like Science, Mathematics, and English often requires the use of language functions (Racca & Lasaten, 2016). The challenge for 21<sup>st</sup>-century teachers is to provide their students with opportunities that are context-dependent and incorporates the idea of doing something productive about what one knows.

The current educational state in the ASEAN region, which includes the Philippines, forefronts on the language-in-policy efforts to provide media for the exchange of human resources within the region. Considering the results culled from this study, it can be gleaned that the majority of Filipino teachers have a lot of work to do in order to catch up. While we glorify our fluency in English as compared to our ASEAN neighbors, our education system needs to emphasize on matters of teacher effectiveness that derived quality and excellent results by alleviating the status of teacher quality in the Philippines.

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# The Counseling Role of the Teacher in Greek Secondary Schools: Investigating Students' Attitudes Toward It

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## Abstract

In Greece, little empirical research has been done to investigate Junior High School students' perceptions on the teacher's role in a guidance and counseling framework, and no recent research at all for High School students respectively. The purpose of the present study fills that gap, using a quantitative research method. The sample consists of 487 students from three General Junior High Schools (Gymnasium) and three General High Schools (Lyceum), as well as one Vocational High School (EPAL). The results show clearly that students desire to have counseling support at their school and also need their teachers to have guidance and counseling skills, to listen to and understand their problems, to support them with what troubles them, to encourage them and contribute to the development of their personality.

**Keywords:** Secondary Education, School Counseling-Guidance, Adolescents

## 1. Introduction

Many educational systems in many countries around the world provide guidance and counseling services to students through the school psychologist or school counselor. In the Greek educational system, this service is not available in all the levels of education or types of schools, and much of the onus falls on the teachers (Paraskevas & Papagianni, 2008). The Greek educational system consists of a compulsory six years of Primary school (6-12 years old) and three years of Junior High school (Gymnasium) (13-15 years old), of which there are six types. Then there is a three-year High School (Lyceum) (16-18 years old), of which there are seven types, and then tertiary level education. The teacher is recognized as an important stakeholder in the counseling process, either directly as state-authorized individuals or bodies who can access and provide targeted counseling services, or indirectly, through a referral process for a student to receive counseling support (Low, 2009).

The importance of guidance and counseling in secondary schools as a practice that integrates teaching and schooling for both the individual and social development of students has been extensively emphasized in the literature (Hughes, 1999; Krivas, 2007). The main aim of guidance and counseling is to give help to students to

cope with any psychological, emotional, social, and academic difficulties as well as provide continual educational support in the choice of subjects and career options (Suhag, Pirzada, Butt, Butt, Zeb & Raza, 2017). It goes without saying that every adolescent responds differently to the challenges they have to face. There are teenagers who have difficulty in coping with issues that might generally be considered small or insignificant, whereas others manage not only to overcome problem situations but also to get empowered by them and even gain new skills and competences (Geldard, Geldard & Yin Foo, 2017). A key factor in being able to do this seems to be positive self-esteem (Bruno & Njoku, 2014; Minev, Petrova, Mineva, Petkova & Strebkova, 2018). In order to develop their self-esteem, young people have to have confidence in themselves, in which both parents and teachers play an important role by offering them opportunities to have positive experiences and healthy relationships (Frant, 2016; Bruno et al., 2014).

It is the nature of the teaching profession in having direct contact on a daily basis with students that actually puts teachers in a position to do counseling (Georgiana, 2015; Brouzos, 1998). When a student confides in the teacher about their emotional or familial problems, then that teacher is called on to pay attention and trying to understand the reasons that cause their student's emotional difficulties or divergent behaviours (Georgiana, 2015). Research suggests that an experienced and properly trained teacher can be more effective than a professional counselor in such situations (McLeod, 2003; Siyez, Kaya & Uz Bas, 2012). Nevertheless, informally, based on their experience, teachers end up advising students and their parents. The literature makes reference to this aspect of the teaching profession, signifying that the teacher's pedagogical role is associated and complementary to the advisory work of a specialist counselor (Manesis, 2012). Siyez et al. (2012) point to the fact that an effective teacher has much in common with a specialist: they empathize with their student, listen with patience, have excellent interpersonal skills, are open to new ideas and are aware of individual differences. Secondary education teachers are a key factor in helping the student to not only adapt to but also make good progress within the school environment, which they do by supporting the student's academic efforts, as well as their personal development (Gabrhelová & Pasternáková, 2016; Swabey, Pullen, Getenet & Dowden, 2018; Paraskeva et al., 2008). The main elements of the teacher's advisory role include creating a positive climate, meeting the students' learning needs, empowering students, as well as strengthening the emotional and social aspects of students' lives to enable them to have a deeper and more profound understanding of themselves and their surroundings (Gabrhelová et al., 2016; Davou, 1994; Paraskeva et al., 2008) including the smooth development of interpersonal relationships, and the ability to handle their emotions, problems and challenges (Malikiosi-Loizou, 2011; Psathopoulou, 2013). The years that a teenager spends at high school (12-18) coincide with the transitional stage of adolescence, a period in life when the young person is not only experimenting with his/her ideas and beliefs but also when the perceptions of self are constantly changing. Self-perception (the way the teenager perceives him/herself) and self-esteem (the view of his/her worth), affect the adolescent's relationships, performance, and behaviour (Tuker, 2018). According to Gordon (2011), the teacher can help their teenage students learn, accept and appreciate themselves.

Guidance and counseling in secondary schools is designed to help students gain a sense of orientation, their goals and achievements, as well as to understand their attitude and behavior in relation to the specific stage of development they are in. In other words, teachers must help the student in the following ways: get to know and accept themselves; set realistic goals; adapt to the social and professional environment; decide on educational and career choices that will develop their personality and tap into the student's potential to the greatest degree (Gavriil, Samoilis, Vitaliotou & Hatzigianoglou, 2000; Georgiana, 2015; Nweze & Okolie, 2014; Kananu, 2002; Filippaki, 2007). In a simplified wording that covers the needs of the present work, guidance and counseling are an integrated school activity that includes processes whose aims are: to help the student to get to know and accept themselves, set realistic goals, adapt to the social and professional environment, to make decisions concerning educational and career choices that will develop the student's personality and make the most of his/her potential (Gavriil et al., 2000; Georgiana, 2015; Nweze et al., 2014).

Based on all of the above, this empirical study has two objectives: the first is to investigate the views of secondary school students on the school's support framework and how they define it, and the second concerns the exploration of secondary school students' views on the teacher's role in providing support and how they define it. It outlines students' perception on the teacher's role that is associated with guidance and counseling.

The study findings can be used in the design of training programmes for teachers so that they can maintain communication, trust and acceptance from their students.

## 2. Method

### 2.1 Participants

The study sample consisted of 487 secondary school students randomly selected from three junior high schools (Gymnasiums), three general high schools (Lyceums) (the acronym: GEL), and one vocational high school (the acronym: EPAL) in Eastern Thessaloniki. Of these, 148 students (30.4%) attended junior high school, 261 (53.6%) attended general high school/Lyceum (GEL), and 78 students (16%) attended the vocational high school/lyceum (EPAL). In terms of gender, there were slightly more males to females, 53.4% and 46.6%, respectively. It was decided to include only third-grade students of junior high school/Gymnasium on account of several questionnaire items that required abstract thinking. It has been shown that around the age of 15, the adolescent is able to think and deal with problematic situations without reference to specific things and facts, begins to examine him/herself (self-awareness), to take into account needs, interests, abilities/skills, values and opportunities, and to seek a career at school or in their free time (Manos, 2000).

2.2. *Questionnaire* The research tool used for the data collection of this study was a questionnaire, whose construction was based on a questionnaire used in a 1987 study carried out on a sample of 2540 Greek Lyceum students from all the geographical regions of Greece (Brouzos, 1998). Initially, we conducted a pilot study in February 2019 on 21 students from the three grades (7 students from each grade) from the same schools who would not participate in the final research, aiming to increase content validity. The study questionnaire comprises two modules: the first contains five (5) demographic questions (gender, year of birth, the grade they were in at school, type of school, and general mark for the previous school year, while the second consists of 55 scaling questions, in six groups-subscales which correspond to the six research questions (2.3). The reliability of the questionnaire was verified using the Cronbach's alpha internal consistency coefficient. The values for all 6 groups of questions were satisfactory (Cronbach's alpha ranging from .72 to .86).

### 2.3. Research Questions

The research questions were:

1. How do students perceive the function of school as providing support and guidance?
2. To what extent do students feel the need for counseling at school?
3. To what extent do students value the counseling role of teachers?
4. How do students evaluate the pedagogical and psychological skills and competences of teachers?
5. To what extent do students value teachers' contribution to the development of their personality?
6. Who do students perceive as significant others to discuss their problems with?

### 2.4 Ethical considerations

Prior to administering the pilot and final research questionnaires to the students, a meeting was held between the researcher and the school head teachers asking for their help in assuring parental consent for student participation in the study, as well as the cooperation of the teachers. The purpose of the study and its design was explained, and participant anonymity and confidentiality were assured. Data collection took place in the students' classes following their consent and after being informed of the purpose of the study. Participation was voluntary and all students retained the right to withdraw from the study at any time and without giving any reason. Formal parental consent was not required for the high school/Lyceum students who wished to participate in the study as they were of adult status.

### 2.5. Limitations of the research

The results of this research are limited by several factors. The first has to do with the sample being from secondary schools in one specific geographical region. Although sufficiently large, the sample is not random in the strict sense of the term, since not all the members of the study population had an equal chance of being selected. Therefore, there were constraints on the application of inferential statistics and generalization of the



findings to the wider population. Another constraint is the issue of respondents' honesty. It is likely that some students have expressed opinions that may not fully reflect their true beliefs, from fear of discrediting their teachers or from feelings of anger at the school failing to meet some need within the difficult socio-economic conditions that they live in.

### 3. Results

In the Results section, summarize the collected data and the analysis performed on those data relevant to the discourse that is to follow. The main findings of the study questionnaire are presented in groups in Tables 1 – 17 below.

#### 3.1. Group 1: The function of school providing support and guidance

Overall the students, to a large extent, did not agree that their teachers provided the help and support they needed to cope with the requirements of a school assignment. Only a total of 34,9% of all participants responded "I agree a lot" and "I totally agree" (22.8% and 12.1% respectively). The students at vocational high school (EPAL) were less negative about their teachers' support. Most of the EPAL students claimed to be "very" (45.5%) and "totally" (36.4%) satisfied, in sharp contrast to the GEL students who stated 16.1% and 5.4% respectively (Table 1).

Table 1. My teachers provide help and support when I cannot cope with the requirements of school work

Scale		1	2	3	4	5	Total
Gymnasium	Frequency	14	46	37	34	17	148
	Percentage%	9.5	31.1	25.0	23.0	11.5	100.0
	Adj. Res	2.9					
GEL Lyceum	Frequency	18	91	96	42	14	261
	Percentage%	6.9	34.9	36.8	16.1	5.4	100.0
	Adj. Res		4.7	2.7	-3.3	-4.1	
EPAL Lyceum	Frequency	0	4	10	35	28	77
	Percentage%	.0	5.2	13.0%	45.5	36.4	100.0
	Adj. Res		-3.5	-3.7	3.9	6.3	
Total	Frequency	32	141	143	111	59	486
	Percentage%	6.6	29.0	29.4	22.8	12.1	100.0

$\chi^2$  (8, N=486) = 107.76,  $p < .01$ , Crammer's  $V = .33$ ,  $p < .01$

1= I do not agree, 2= I agree a little, 3= I moderately agree, 4= I agree a lot, 5= I totally agree

Table 2 (see Appendix: Table 2), also, shows that, irrespective of the type and function of the school, the students considered that the teachers did not acknowledge their efforts to a large extent. Only a total of 41.7% of all participants responded "I agree a lot" and "I totally agree" (28.1% and 13.6% respectively). The students at vocational high school (EPAL) were less negative about their teachers' acknowledgement with 46.2% stating they agreed a lot and 35.9% that they totally agreed. A statistically significant percentage of junior high school/Gymnasium students claimed they did not agree that their teachers acknowledged their efforts.

Most students, with the exception of those attending the vocational high school (EPAL), moderately discuss their personal problems with their teachers. There was a statistically significant difference between the types of high schools regarding if they are talking to their teachers about their personal problems and difficulties. Only a 15.6% of EPAL students responded that they "do not agree" about talking to teachers about their personal problems and difficulties, in striking contrast to GEL students at 66.7%, and to the overall total of participants at 54.1% ( $p < .01$ ) (Table 3).

Table 3. I talk to my teachers about my personal problems, my personal difficulties

Scale		1	2	3	4	5	Total
Gymnasium	Frequency	77	34	15	16	6	148
	Percentage%	52.0	23.0	10.1	10.8	4.1	100.0
GEL Lyceum	Frequency	174	61	17	5	4	261
	Percentage%	66.7	23.4	6.5	1.9	1.5	100.0
	Adj. Res	6.0		-4.1	-6.0		
EPAL Lyceum	Frequency	12	9	27	24	5	77
	Percentage%	15.6	11.7	35.1	31.2	6.5	100.0
	Adj. Res	-7.4		6.7	7.2		
Total	Frequency	263	104	59	45	15	486
	Percentage%	54.1	21.4	12.1	9.3	3.1	100.0

$\chi^2(8, N=486) = 134.40$ ,  $p < .01$ , Cramer's  $V = .372$ ,  $p < .01$

1= I do not agree, 2=I agree a little, 3=I moderately agree, 4=I agree a lot, 5= I totally agree

However, as can be seen in Table 4 (see Appendix: Table 4), over half (55.4%) of the students believe that it is moderately (37.7%), very (10.7%), and extremely (7%) important to be able to speak with teachers about their personal difficulties at school.

Furthermore, most students stated that they do not have help and support from their teachers for their personal problems. A total 72.2% of all students responded that they “don't agree” and “agree a little” (50.3% and 21.9% respectively) (Table 5).

Table 5. My teachers offer me help and support for my personal problems

Scale		1	2	3	4	5	Total
Gymnasium	Frequency	75	38	12	17	5	147
	Percentage %	51.0	25.9	8.2	11.6	3.4	100.0
GEL Lyceum	Frequency	157	58	28	9	8	260
	Percentage %	60.4	22.3	10.8	3.5	3.1	100.0
	Adj. Res	4.8		-2.2	-5.2		
EPAL Lyceum	Frequency	12	10	28	23	5	78
	Percentage %	15.4	12.8	35.9	29.5	6.4	100.0
	Adj. Res	-6.7		6.1	6.2		
Total	Frequency	244	106	68	49	18	485
	Percentage %	50.3	21.9	14.0	10.1	3.7	100.0

$\chi^2(8, N=485) = 102.89$ ,  $p < .01$ , Cramer's  $V = .33$ ,  $p < .01$

1=I don't agree, 2=I agree a little, 3=I moderately agree, 4=I agree a lot, 5=I totally agree

However, Table 6 (see Appendix: Table 6) shows that a total of 47.1% of students state that it is “very” (24.5%) and “extremely” (22.6%) important that teachers at school should be able to provide help and support. Interestingly, more than half of GEL students (52.5%) responded that it was “very” (27.2%) and “extremely” (25.3%) important, in contrast to only a total of 24.4% of EPAL students who claimed that it was “very” (14.1%) and “extremely” (10.3%) important for teachers to do so ( $p < .01$ ). On the other hand, a total of 18.9% of students stated that it was “slightly” (14.8%) and “not at all” (4.1%) important.

### 3.2. Group 2: The necessity for counseling students at school

Students need a person they can trust at school to discuss the problems that concern them. Table 7 shows that 21% and 27.4% responded that this statement was “very much” and “totally” the case, respectively, while another 25.9% stated that it is moderately the case.

Table 7. I need a person I can trust at school with whom I can talk about my personal problems

Scale	Frequency	Percentage %	Aggregate Percentage %
Not the case	56	11.5	11.5
Slightly the case	69	14.2	25.7
Moderately the case	126	25.9	51.6
Very much the case	102	21.0	72.6
Totally the case	133	27.4	100.0
Total	486	100.0	

Table 8 (see Appendix: Table 8) shows that over half the students (52.5%) stated that they wanted the trustworthy person with whom they can discuss their problems to be a teacher. More specifically, 27.7%, 15.5% and 9.3%, responded that this was "slightly," "very much" and "totally" the case, respectively. Interestingly, 21.8% of vocational high school students (EPAL) stated that it was "totally" the case that they would like teachers to be the ones helped them with their personal problems in comparison to only 6.6% of GEL students. In contrast, more junior high school/Gymnasium students (27.2%) responded that they did not want that person to be a teacher at all, in comparison to 18.9% of GEL and a mere 9% of EPAL students ( $p < 0.01$ ).

### 3.3. Group 3: Teachers' counseling attitude towards students

The majority of students (74.2%) agree that a significant number of their teachers show an interest and listen to them with care. More specifically, in Table 9, students responded that "a sufficient number/enough" 42.7%, "many" 21%, and the "most" 10.5%, of their teachers listen carefully to them.

Table 9. Teachers listen carefully to students

Scale	Frequency	Percentage %	Aggregate Percentage %
Very few	15	3.1	3.1
Few	110	22.7	25.8
A moderate number	207	42.7	68.5
Many	102	21.0	89.5
Most	51	10.5	100.0
Total	485	100.0	

The total positive percentage of 60.2% who responded that "A sufficient number," "Many" and "Most" (33.7%, 15.2%, 11.3%, respectively) of their teachers are interested in creating friendly relationships with students, can be considered satisfactory. Participants from the vocational high school (EPAL) responded the most positively that most teachers are interested in creating a friendly relationship with students. In Table 10 it can be seen that EPAL students responded that "many" (29.5%) and "most" (24.4%) of their teachers are interested in creating friendly relationships with them in comparison to GEL students who stated 11.5% and 4.6%, respectively ( $p < .01$ ).

Table 10. Teachers are interested in creating a friendly relationship with students

Scale		1	2	3	4	5	Total
Gymnasium	Frequency	12	41	58	20	16	147
	Percentage%	8.2	27.9	39.5	13.6	10.9	100.0
GEL Lyceum	Frequency	35	97	86	30	12	260
	Percentage%	13.5	37.3	33.1	11.5	4.6	100.0
	Adj. Res				-2.3	-4.1	
EPAL Lyceum	Frequency	1	7	28	23	19	78
	Percentage%	1.3	9.0	35.9	29.5	24.4	100.0
	Adj. Res				3.9	4.8	

<b>Total</b>	Frequency	59	134	164	74	55	486
	Percentage%	12.1	27.6	33.7	15.2	11.3	100.0

$\chi^2(8, N=486) = 64.69, p < .01$ , Cramer's V = 0.26,  $p < .01$

1 = Very few, 2 = Few, 3 = A moderate number, 4 = Many, 5 = Most

However, students seem to find it hard to believe that teachers can be their interlocutors who fully understand them and show individual interest in their opinions, attitudes, and feelings. In Table 11 (see Appendix: Table 11), it can be seen that only 6.2% of students respond that "most" teachers are interested in students' opinions, attitudes, and feelings.

#### 3.4. Group 4: the students' perspective of their teachers' pedagogical and psychological skills and competences

Students believe that a sufficient number of teachers effectively address their school problems, but few teachers behave appropriately with students who have personal problems. In Table 12, it can be seen that an overall total of 67% that is two out of three students believe that "a sufficient number (42.2%), "many" (18%), and "most" (6.8%) teachers can effectively deal with students' school problems.

Table 12. Teachers can effectively deal with students' school problems

Scale	Frequency	Percentage %	Aggregate Percentage %
Very few	29	6.0	6.0
Few	130	26.9	32.9
A moderate number	204	42.2	75.2
Many	87	18.0	93.2
Most	33	6.8	100.0
Total	483	100.0	

Students stated that many teachers did not spend enough time on their problems in order for them to know and understand the feelings and relationships that make students' everyday life difficult. 56.9% of the students think that "few" (44.5%) and "very few" (12.4%) of the teachers spend time on their problems or those of their classmates. (see Appendix: Table 13)

Table 14. Teachers are good counselors when it comes to important career decisions (information on careers/studies)

Scale		1	2	3	4	5	Total
Gymnasium	Frequency	2	39	46	33	6	146
	Percentage%	1.4	26.7	31.5	22.6	4.1	100.0
GEL Lyceum	Frequency	3	60	67	66	32	260
	Percentage %	1.2	23.1	25.8	25.4	12.3	100.0
	Adj. Res				1.6	3.9	
EPAL Lyceum	Frequency	0	25	43	10	0	78
	Percentage %	0	32.1	55.1	12.8	0	100.0
	Adj. Res				-2.2	-2.8	
<b>Total</b>	Frequency	5	124	156	109	38	484
	Percentage %	1.0	25.6	32.2	22.5	7.9	100.0

$\chi^2(8, N=484) = 53.34, p < .01$ , Cramer's V = .24,  $p < .01$

1 = Very few, 2 = Few, 3 = A moderate number, 4 = Many, 5 = Most

Table 14 shows that 62.6% of students consider that "a moderate number" (32.2%), "many" (22.5%) and "most" (7.9%) of their teachers, are good counselors when it comes to making career/study decisions. Students from GEL gave higher percentages in comparison to those from EPAL ( $p < 0.1$ ).

### 3.5. Group 5: The contribution of teachers to the development of students' personality

Students feel that overall teachers have a positive impact on the development of their personality. Table 15 shows that more than half the students (53.1%) gave a neutral (neither positive nor negative) response regarding teachers' influence on making them feel that they were worthy, while 28.1% responded that they had a "positive" influence and only 6.5% that they had a "very positive" influence. 37% and 7.5% of students stated that teachers have a "positive" and "very positive" influence respectively on making them feel that they have abilities/skills, but once again, the highest percentage responded that teachers had neither a positive nor negative influence on this item (45.4%). The highest percentage (42.1%) responded that the teacher had neither a positive nor negative influence on making them feel self-confident that they have the potential to achieve their goals. However, 37.7% and 9.5% of students responded that teachers have a "positive" and "very positive" influence, respectively. A relatively high percentage of students (32.2%) together with 9.1% stated that teachers had a "positive" an "very positive" influence, respectively on respecting and accepting themselves, while almost one in two students (49.1%) stated that teachers had neither a positive nor negative influence. A total of 40.9% stated that teachers influence them on having the ability to resolve conflicts with others to a "positive" (34.1%) and very positive (6.8%) extent, whereas close to half (49.5%) stated neither a positive or negative influence.

Table 15. My teachers have influence

Scale		1	2	3	4	5	Total
on making me feel that I am worthy	Frequency	25	34	255	135	31	480
	Percentage%	5.2	7.1	53.1	28.1	6.5	100.0
on making me feel that I have abilities/skills	Frequency	18	30	217	177	36	478
	Percentage%	3.8	6.3	45.4	37.0	7.5	100.0
on making me feel that I have the potential to achieve my goals	Frequency	18	33	202	181	46	480
	Percentage%	3.8	6.9	42.1	37.7	9.5	100.0
on respecting and accepting myself	Frequency	22	24	235	154	44	479
	Percentage%	4.6	5.0	49.1	32.2	9.1	100.0
on having the ability to resolve conflicts with others	Frequency	19	27	238	164	33	481
	Percentage%	4.0	5.6	49.5	34.1	6.8	100

1= Very negative [influence], 2= Negative [influence], 3= Neither positive nor negative [influence], 4= Positive [influence], 5= Very positive [influence]

The vast majority of students clearly expressed that they would like teachers to exercise a more positive influence in order to enhance their self-esteem (92.3%), self-sufficiency (94.2%), self-confidence (92.7%), self-respect (91.0%), and their ability to communicate with others (85.4%) (see Appendix: Table 16).

### 3.6. Group 6: Behavior of students in discussing their problems

Table 17 shows whom students prefer to discuss their problems with. Firstly, the majority of students choose to discuss with their friends when they encounter problems with their parents (70.5%), with their classmates (75.3%), with their partner (68.5%), and with their teacher (76.8%). Another 76.8% will talk to their parents when they have a problem with their teacher, and 61.8% will discuss it with their partner, 38.6% prefer to discuss it with another member of the family or relatives, while only 35.7% of students claim they would discuss with their teacher if they encountered problems with them, which, however, is still the lowest percentage. When students have a problem with their classmates, only 25.7% say they would discuss it with their teachers, which is the lowest percentage. Also, when they encounter problems with their parents or with their partner, very few choose to discuss it with their teacher (a mere 2.9% and 6.4% respectively).

Table 17. When I have a problem ...

Scale		1	2	3	4	5
With my parents, I talk to ...	Percentage%	2.9	70.5	-	65.8	49.4
With my classmates, I talk to ...	Percentage%	25.7	75.3	53.1	65.6	29.3
With my partner/girlfriend	Percentage%	6.4	68.5	46.7	66.2	29.0
With my teachers, I talk to ...	Percentage%	35.7	76.8	76.8	61.8	38.6

1=with my teachers, 2=with my friends, 3=with my parents, 4=with my partner/girlfriend/boyfriend, 5=with another member of my family or relatives

As with the previous findings, even when the problems relate to the student-teacher relationship, the student does not first approach the teacher to discuss it with them. Interestingly, third grade of high school (both GEL and EPAL) have the lowest percentage in this case with only 15.7% stating they would talk to their teachers. In contrast, the highest percentage (75.3%) stated “yes” to talking to their friends, while the second highest (65.6%) would talk to their partner/girlfriend/boyfriend. In relation to gender, both males and females had similar responses, with the exception of talking to parents, where the female students gave a substantially higher “yes” to the males, 61.8% and 45.5%, respectively, and to talking to another member of the family or relatives with 34.7% and 24.5%, respectively (see Appendix: Table 18).

#### 4. Conclusions-Discussion

The findings from the six (6) research questions (see 2.3) are presented below. In relation to RQ 1, students do not find the support, acknowledgement, and help they would like to have from school teachers in relation to school and personal issues. Students in junior high school/Gymnasium and general high school/Lyceum (GEL) agree the least, in contrast to the vocational high school/Lyceum (EPAL) students who appear to be less negative in their statements. Students consider it a very important function of the school to create supportive relationships between teachers and students (Tian, Han & Huebner, 2014). They consider it important that teachers can help them in their schoolwork and acknowledge their efforts (Brouzos, Vassilopoulos, Korfiati, Baourda, 2015; Owens, Simmons, Bryant & Henfield, 2011).

In relation to RQ 2, the students clearly feel the need for counseling at school, as is confirmed by other studies (Owens et al., 2011; Sculli, 2011; Tian et al., 2014) and in this context, they give the teacher the opportunity to be the person who will provide it (Brouzos et al., 2015; Kaur & Malhotra, 2013) with more vocational high school/Lyceum (EPAL) students wanting it. In relation to RQ 3, students have difficulty in stating that their teachers understand their behavior and feelings, even though they claim that a sufficient number of teachers listen to them and the majority are interested in creating a friendly relationship with them. These views are in agreement with the results of other studies on the need for teacher training and support, as the increasing complexity of the social, emotional and behavioral problems of students requires an effective response on a wide range of issues (Kourkoutas & Giovazolias, 2015; Lam & Hui, 2010; Mazaraki, 2013; Siyez et al., 2012).

In relation to RQ 4, the students express the teachers' lack of counseling skills, which is also reflected in other studies (Brouzos et al., 2015; Nyamwaka., Nyamwange, Ombaba & Magaki, 2013). Students particularly highlight that teachers do not spend enough time on their problems or the relationships-conflicts between students and that teacher behavior is not always appropriate with students who have personal problems. These views are in agreement with the findings of other relevant research which show that teachers have a heavy program (Lam et al., 2010), or that teacher responsibility stops at teaching, while their involvement in the social and emotional development of their students and career planning is outside their field of action and advisory support is more a field for specialists (Siyez et al., 2012).

In relation to RQ 5, the findings clearly show that students need teachers to maintain good communication with them and to positively influence the development of their personality in regards to self-esteem, self-sufficiency, self-confidence and self-respect, as well as exercise conflict management (Brouzos et al., 2015; Chireshe, 2011;

Demirdag, 2014; Owens et al., 2011; Tian, 2014; Sculli, 2011). In relation to RQ 6, parents continue to play an important role in the help given to adolescents to deal with dilemmas and difficulties in their everyday life (Bireda & Pillay, 2018; Kaur et al., 2013; Qu, Fuligni, Galvan & Telzer, Toombs, Unruh & McGrath, 2018). Moreover, mutual trust and communication seems to exist among adolescents and their friends, as well as adolescents and their partners (Manhas & Roshan, 2015; Kaur et al., 2013; Ray, Mahapatro & Kar, 2011).

In conclusion, the study's findings clearly reflect the reasoning that if the aim of school, besides imparting knowledge, is to support students in the socialization process and the development of psychosocial skills, then teachers need to enrich their role by also providing Guidance and Counseling to their students. The present study focused on a population of Greek general and vocational secondary school students in a particular geographical area, whereas future research conducted on a larger population that includes students from all types of high schools in more regions of Greece would provide results that could be more readily generalized.

The present study was based on a quantitative research method, whereas a future study using a combination of qualitative and quantitative research methods (mixed methods), could give the researcher very different perspectives on the subject of study. Integrating the two methodologies would offer great benefits, by enabling the researcher to compare and contrast the results, which would contribute to deeper insights in the findings and conclusions that can be drawn.

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# The Use of Thanking Speech Act Strategies in English Realized by Kurdish EFL Learners at Soran University

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## Abstract

The present study aims to investigate the most frequently-used thanking strategies by Kurdish EFL learners. This study attempted to examine the most frequently- used thanking strategies in Kurdish language. DCT represents various scenarios where the participants are asked to write down the terms they use to thank others. The participants involve people from different stages of language proficiency. The analysis of data based on Cheng's (2005) taxonomy of 8 strategies to express gratitude. The study involved fourteen Kurdish EFL learners of English language at Soran University. All of them were randomly selected with regard to their age and gender. The results showed that 'thanking, state of favor, appreciation' were the most common used strategies among males and females Kurdish EFL participants.

**Keywords:** Thanking, Thanking Strategies, Speech Act, Kurdish EFL Learners

## Introduction

Expressions of gratitude are closely linked to the notion of verbal politeness. A speech act in linguistics and the philosophy of language is an utterance that has performative function in language and communication. Because the current study examines the speech act of thanking, it would appear to be vitally important first to familiarize the theory of speech act. One of the most important studies that have contributed to evolving the speech act theory was conducted by Austin in a number of lectures that were published in a book entitled "How to Do Things with Words" (1962). Through this book, Austin classifies speech acts on three levels: "locutionary", "illocutionary", and "perlocutionary acts" (1962, p. 94, 98, 99).

According to Austin, a speaker using an illocutionary act impacts the hearer. He states that "saying something will often, or even normally, produce certain consequential effects upon the feelings, thoughts, or actions of the audience, or of the speaker, or of other persons..." (1962, p. 101). And so, he states that speech acts could be expressed directly or indirectly (1962, p.32).

Many studies have been done on the speech act of thanking. Some studies investigate the strategies used by interlocutors in different languages, while other research has put more focus on analyzing speech acts of

thanking with reference to their functions and forms. Other studies investigate the influence of “pragmatic transfer” on EFL/ESL learners’ performance of speech acts of thanking. According to several scholars, the speech act of thanking is a universal illocution across languages and cultures. (Coulmas,1981; Aijmer, 1996; & Schneider, 2005). Additionally, gratitude expressions are utilized "when a speaker wants the addressee to know that s/he is grateful for what the addressee has said or done" Jautz (2008, p 142). Holmes (1986: 346) makes a remarkable distinction between negatively affective speech which can be diminished, and positively affective speech which can be enhanced. An enhanced thanking, *thank you very much*, is possible, whereas a diminished thanking, *\*thank you a little*, seems odd. The expression *thank you* is, therefore, a positively affective speech act.

According to Eisenstein and Bodman (1995), expressing gratitude can "engender feelings of warmth and solidarity among interlocutors" (1995, p.64). Jung (1994, p.20) goes further in his research paper associated with speech acts of thanking that gratitude expression has the "effect of enhancing rapport between the interlocutors."

## Literature Review

It is of particular interest to consider ways where the meaning of an utterance in terms of objective of speaker is delivered. In this sense, the term of speech act can be utilized as a reference to ‘actions such as ‘requesting”, ‘questioning” or ‘informing.’ we can define a speech act as an action performed by a speaker with an utterance’ (Yule 2014: 131). Such a speech can be delivered directly or indirectly. In the majority of cultures, asking people to perform an action directly seem to be labeled as face-threatening act. This is likely due to the fact that it indicates having the social power of such dominant people over others (ibid). Consequently, utilizing the indirect speech act eliminates the hypothesis of social power.

Brown and Levinson (1987: 61) labeled face as the ‘public self-image’ that each participant willing to argue for himself. Additionally, the two kinds of face – negative and positive faces can act differently. Negative face is the necessity to be autonomous and free from annoyance, whereas, the positive face is essential to be linked, appropriate, and to be a member of the team. Yule (2014) further explains the face as below:

A face-saving act that emphasizes a person's negative face will show concern about imposition (I'm sorry to bother you...I know you are busy, but...). A face-saving act that emphasizes a person's positive face will show solidarity and draw attention to common goal (Let's do this together...; you and I have the same problem. (Yule, 2014: 133).

Likewise, speech act has been utilized and expressed by different scholars in various ways. Yusefi et al. (2015: 211) claimed that showing appreciation and thanking seems to be one of the most frequently used speech act and key tools which reinforces the connections between the members of a general public. Correspondingly, thanking can be regarded as a speech act whose interpretation has been on the basis of the manner where it is conducted, and its correlation with other speech acts within identical language(Aijmer, 1996; Kumatoridani, 1999). Similarly, on the basis of the context, they are used the way of expressing speech act forms, including thanking, varies from one culture to another one. Okamoto and Robinson (1997) claim that British thank you is commonly employed while communication with high-status speakers. Likewise, according to Mey (1998), several linguistic behaviors, including expressing thanks, demanding, and making an apology are likely to be concerned with identical circumstances in similar manners across cultures. Likewise, Grant and Gino (2010) claim that expressing gratitude can be omnipresent within human public life; A great number of cultures show thankfulness appropriately which has significant societal value, which can be present in the ‘positive face’ of the supporter. Nevertheless, the manner that thankfulness is communicated can mostly be decided by ‘socio-cultural values’ and bonds leading every culture (as cited in Yusefi et al., 2015). Nonetheless, while some forms of speech act between bilingualism such as English and Kurdish are discussed, certain issues may emerge. This is because, every culture has its own expressions, for instance, in Kurdish culture one of the offer responses for any kind of drinking such as drinking a cup of tea might be ‘dest khosh’ literally means ‘good hand.’ However, it could be meant ‘well done’ in English as a target language, which may display a kind of thankfulness to the person who offers the drinking. As a result, Kurdish EFL learners are likely to challenge these difficulties as soon as they employ the speech acts that vary from their own source language in terms of social dissimilarities and

terminologies. In this sense, it is significant that communicators of a society to be familiar with the pragmatic competence of any culture. As Kamel (1993:27) has the following analysis for thanking speech act in Muslim societies:

It is the belief in Arabic societies that God is the source of all things, good and bad from a human point of view, so God or Allaah is the first to be thanked. ? Allaah. According to the Muslim belief has to be thanked for whatever happens, good as well as bad events. Thanking from this perspective can be interpreted as an expression of gratitude for past acts of the addressee, thanking also may be intended as a compliment or flattery, perhaps in the hope of receiving future favors and avoiding more of God's wrath (Ibid). Likewise, many religious terminologies are being used in the thanking speech act of Kurdish pragmatic competence stemming from Arabic, for instance, alhamdulillah (thanks are due to God). This may indicate that Arabic culture has a great impact on thanking speech act in the Kurdish language as well. On the other hand, Cheng (2005: 1) argues that saying appreciation is a speech act which can be communicated at a primary age and can be frequently implemented by native speakers of many languages. Consequently, it is widely argued that learners are highly likely effectively express thank you in the target language. Nevertheless, researches shed light on the point that even forward-thinking students may face the problem of sufficiently stating thanks. On the other hand, Searle (1969) regarded thanking as an expressive illocutionary performance. While expressing thanks, the utterer states appreciation for the listener's contribution to a past deed that was advantageous to the talker.

Wong (2010) argues that thank you, and thanks could be regarded as the most shared conducts to show appreciation in today's contemporary domain.

The practice of gratitude has several advantages. Lyubomirsky, Sheldon, and Schkade (2005) maintained that, showing thankfulness can assist the general public to handle worrying circumstances healthier, and to reinforce social contacts (as cited in Yusefi et al., 2015).

Once such a speech act of thanking is communicated properly, it could give rise to emotional state of warmth and cohesion among communications, sustaining and increasing social interconnection and collective relationship within the social order (Eisenstein and Bodman,1993). On the other hand, there might be some drawbacks if the members of society are unsuccessful in expressing gratitude appropriately. As Eisenstein and Bodman (1986) believed that such disadvantages might include having bad contacts within speakers' connections, resulting in frustration, antipathy, and anger among them (as cited in Yusefi et al., 2015, p. 212).

This study will investigate thanking strategy in both Sorani and Kurmanji- Badini dialects of the Kurdish language in the Kurdistan Region of Iraq (KRG). Despite the fact that a considerable number of researches have been conducted in many languages with regard to the speech act of thanking, no or very seldom studies have concentrated on the Badini and Sorani Speech acts of thanking. Each community has its own way of thanking, which may vary from other societies culturally and socially. As a result, it is required to be familiar with the ways of speech of thanking in both dialects in Kurdish language, so that the process of communication can be successful with less having miscomprehension.

### **Research questions**

1. What are the most usable thanking strategies utilized by Kurdish EFL learners?
2. Does learning the English language affect Kurdish EFL learners on their use of thanking and gratitude strategies?

### **Methodology**

#### **Research method**

This research belongs to descriptive-qualitative research because it is aimed to investigate and explain the most utilized gratitude expressions by Kurdish EFL learners.

## Participants

The current study involved 14 Kurdish EFL learners of English language at Soran University. All of them were randomly selected regardless of their age and gender difference.

## Instrument

The research instrument used for this study was a modified version of the Discourse Completion Task (DCT) developed by Cheng (2005). The DCT used in this study consisted of 7 different scenarios. The scenarios contained the most common situations that learners may encounter in their college life and was written in both Kurdish and English languages. The participants were asked to express their response to each described situation in the provided blank space after each of the situations.

## Procedure

The Discourse Completion Test (DCT) had been conducted to elicit thanking strategy. To elicit the information, The 7 situations in the DCTs (see appendix) were adopted from the questionnaire items (14 items) summarized by Eisenstein and Bodman (1993, p. 75-76). The participants were asked to complete the DCT based on several different situations presented. They were asked to fill out the instrument and display different thanking expressions they use in Kurdish. In this study, for collecting the data, questionnaire in the form of paper was spread up to different subjects.

## Data analysis

After collecting the data via DCTs, responses were categorized based on the thanking strategies scheme proposed by Cheng (2005). Thanking strategies Taxonomy by Cheng are:

1. Thanking
2. Appreciation
3. Positive feelings
4. Apology
5. Recognition of imposition
6. Repayment
7. Other expressions
8. Alerters

After collecting all the data through Discourse completion test, responses were categorized based on the thanking strategies proposed by Cheng (2005).

### 1. Thanking

Participants say "thank you" in the following different ways:

- a. Thanking by using "thank you" (Thanks a lot! Thank you very much!)
- b. Thanking by using "thank you" and mentioning the favor (Thank you for your help!)

### 2. Appreciation

- a. Thanking and using the word appreciate. (Thank you! I appreciate)
- b. Thanking and promising. (Thank you! I will do my best)

### 3. Positive feelings

- a. Thanking and stating the reason. (Thank you for your help!)
- b. Thanking and farewell. ( Thank you! bye-bye)

### 4. Apology

- a. Using apologizing words. (I am sorry!)
- b. Apologizing and mentioning the favor. ( I am sorry! I am sorry for being late)

- c. Thanking and compensating. (Thank you! I will do your part next time)
- d. Thanking and offering promise. (Thank you! I will do my turn next time)

#### 5. Recognition of imposition

- a. Acknowledging the imposition. (I know that you were not allowed to give me extra time!)
- b. Stating the need for the favor (e.g., I try not to ask for extra time, but this time I need it!)

#### 6. Repayment

- c. Offering and promising. ( Next time I will treat you)
- d. Feeling indebted. ( I owe you next time)

#### 7. Other Expressions

- a. Small talk.
- b. Leave-taking. ( goodbye)
- c. Joking. ( next time is your turn, don't forget)

#### 8. Alerters

- a. Titles and names( Mr, Dr, Azad, Sir)
- b. Attention getter. ( really, well, Hey)

### Results

In the following tables, the description of ten scenarios, participants' responses, and strategies of thanking expression of speech act sets and the discussion of the research findings are presented below.

**Situation One:** You board the bus, pay your money and take a seat near the front of the bus. Just before your stop, you guess that the driver is not going to stop. You move to the front, and ask the driver to stop, and he stops.

No	Responses	Freq	Strategies
1	Thank you, Mr.	7	Thanking
2	Thank you, sorry to bother you	2	Thanking + Apologizing
3	Would you stop on this stop, please?	1	Requesting + asking permission
4	Thank you, it is great.	4	Thanking + complimenting

In situation one, different responses were given by the participants, mostly used is Thanking and also complimenting.

**Situation Two:** You work for a large company, which is usually very busy. You send your manager a request for some days off. The vice-president of personnel calls you into his office. He tells you to sit down. You feel a little nervous, because you have only been working there for six months. The vice-president says, 'You're doing a good job. In fact, we are so pleased with you that I am going to give you a raise'.

No	Responses	Freq	Strategies
1	Thank you so much	7	Thanking with intensifiers
2	Thank you for your appreciation, it is makes me happy	3	Thanking +giving appreciation+ expressing delight
3	Oh, really? Thank you very much.	1	Expressing surprise+ thanking with intensifier
4	Thank you very much, I will do my best.	2	Thanking with intensifier + promising
5	Thank you very much for your attention.	1	Thanking with intensifier by stating the reason

In the second situation, all the participants showed thanking strategy speech act which combined with appreciation, expressing delight, and promising.

**Situation Three:** In the supermarket, you ask the cashier to bag your groceries. He does this and then turns to begin serving the next customer. You pay and pick up your bags to leave.

No	Responses	Freq	Strategies
1	Thank you very much	8	Thanking with intensifier
2	Thank you and bye	2	Thanking+ leave-taking
3	Thank you for your help	4	Thanking+ stating the reason

In the third situation, all the participants used simple thanking expression and thanking, followed by stating the reason and leave-taking.

**Situation Four:** At the table in a restaurant a friend says, 'you have something on your face.' You ask where. Your friend tells you. You rub your face and ask, 'Is it off?' your friend says that it is.

No	Responses	Freq	Strategies
1	Thank you	9	Thanking
2	Thank you for your attention	2	Thanking+ stating the reason
3	Thank you doe telling me	2	Thanking+ stating the reason
4	Thank you, golden man	1	Thanking + complimenting

In the fourth situation, the participants expressed their thanking gratitude with stating the reason and mentioning complimenting.

**Situation Five:** You find yourself in sudden need of money--\$500. You mention this to a friend. Your friend immediately offers to lend it you. At first, you say, 'Oh no, I didn't mean it as a request. I couldn't take it.' Your friend says, 'Really, it's all right. What are friends for?' Your friend insists again, and you take the check.

No	Responses	Freq	Strategies
1	Thank you very much.	4	Thanking with intensifier
2	Thank you very much. I will give it back to you soon.	3	Thanking with intensifier + stating repayment
3	Thank you. I will not forget you kindness.	3	Thanking+offering promise
4	I am really grateful for your help	2	Expressing deep feeling of thanking
5	Indeed, thank you, and you're my best friend	2	Expressing surprise+ thanking+compliment

The fifth situation brings length thanking speech acts through generosity, kindness, and also friendship as well as offering promise and repayment. This is very common in Kurdish culture and society. Kurdish people try their best socially to return the money as soon as possible.

**Situation Six:** You are studying in another city. Both you and your roommate work. You come home late from work and find that your roommate has done some work around the house that you had promised to do, but had not had a chance to do.

No	Responses	Freq	Strategies
1	I am very sorry. Next time I will do it for you.	3	Apologizing for promise breaking+ stating compensation
2	I am sorry, I made you tired	4	Apologizing+ expressing the state of reason
3	Thank you. You are my best friend.	2	Thanking+ praising
4	I am sorry, I was late, and you have done all the work that I have to do	1	Apologizing+ stating reason+ compliment
5	I am sorry	1	Apologizing
6	I am really sorry that I was late. Thank you	1	apologizing+ stating reason+ thanking
7	Thank you very much for doing my work	2	Thanking with intensifier+ stating the reason

In situation number six, participants used apologizing speech act mostly. Expressing their terrifying sorry, followed by compensation and praising. And also, some of them used simple thanking with the state of repayment and complimenting.

**Situation Seven:** Your friend suggests going out to lunch. You say that you'd like to go, but you only have \$2. Your friend says. 'Ah, don't worry. I'll treat you today.' Your friend takes you to a very nice restaurant –a much more expensive one than you usually go to. You have a wonderful meal. Your friend pays, and you get up to leave.

No	Responses	Freq	Strategies
1	Thank you for the lunch	5	thanking
2	Thank you very much for the meal	3	Thanking with intensifier
3	Thank you very much. Next time I will treat you.	3	Thanking with intensifier+ return offering
4	It is a nice day today for having this meal	2	Expressing delight
5	Thanking and being sorry for not having enough money to treat you	1	Thanking+ expressing indebtedness

All the participants stated thanking expressions which combined with other speech acts like suffering return, expressing delight, and expressing indebtedness.

## Discussion & Conclusion

The present study aimed at investigating the use of thanking strategies among Kurdish EFL learners learning English as a foreign language at Soran University. Considering the first objective of the study, the results showed that Kurdish EFL learners used thanking speech act strategies from simple thanking to length one alongside of stating the reason and the favor. These results to some extent are similar to Yasami and Rastegar (2014) which showed that Iranian EFL learners experienced the use of thanking strategies and its subcategories (thanking, thanking with intensifiers and mentioning the favor).

Due to the scenarios and situations presented to the participants, all the participants used thanking speech acts ranged from simple thanking speech acts length and more complex speech acts. Friendship, age, gender, and familiarity would be contributing factors for speakers of the English language to behave and speak in a polite language. The results of this study showed that thanking, compensation, appreciation, state of the reason, and repayment were regarded as the most frequently used strategies by Kurdish EFL learners.

There might be some limitations to the current study. As the first limitation of the results, the findings of this study cannot be generalized to all Kurdish EFL learners because of the small participants of Kurdish EFL learners in this study. Secondly, the researchers used one data collection instrument with some number of

Kurdish participants. For more data and reliability, further studies are recommended through using more methods of data collection instrument.

The use of these strategies can be attributed to the Kurdish learners' cultural values and politeness. And also, learners can be aware of the gaps existing between the first mother tongue language and English either as a second language or foreign language. On this account, English language teachers can enhance their learners to be aware of socio-pragmatic differences and similarities between the source language and target language.

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### Appendix: English and Kurdish translated scenarios Instrument (DCT)

**Situation One:** You board the bus, pay your money and take a seat near the front of the bus. Just before your stop, you guess that the driver is not going to stop. You move to the front, and ask the driver to stop and he stops.

**You would say: .....**

حاله تی یه کهم: له پاسیک سوار دهییت، پاره کهت دهدهی و کورسیه که له پێشهوه دهگری. ساتیکی کهم پێش ئوهی دابهزیت، وا ههست دهکهیت که شوفیره که ناوهستیت، دهچیته پێشهوه و داوای لیده کهیت بوهستیت و ئه ویش دهوهستیت.

تۆ دهلیت .....

**Situation Two:** You work for a large company, which is usually very busy. You send your manager a request for some days off. The vice-president of personnel calls you into his office. He tells you to sit down. You feel a little nervous, because you have only been working there for six months. The vice-president says, 'You're doing a good job. In fact, we are so pleased with you that I am going to give you a raise'.

**You would say:.....**

حاله تی دووهم: کار بۆ کۆمپانیایه کی گهوره دهکهیت، که هه میسه قهبالغه. تۆ نامهیه که بۆ بهرئوبه ره کهت ده نیری که مۆلهت بدات بۆ ماوهی چهند رۆژیک. وه دواتر جیگری بهرئوبه ره بهیوه نیت پیه ده کات و داوات لیده کات بۆ ژوو ره کهی، پیت ده لیت که دابنیشیت و تۆش هه ندیک قه له قی، چونکه تۆ ماوهی شهش مانگه دهست به کار بووی له وئ. جیگری بهرئوبه ره پیت ده لیت "تۆ کاریکی باش ده کهیت، ئیمه زۆر دلخۆشین که پله کهت بهر زبکه یه وه."

تۆ دهلیت ....

**Situation Three:** In the supermarket, you ask the cashier to bag your groceries. He does this and then turns to begin serving the next customer. You pay and pick up your bags to leave.

**You would say:.....**

حاله تی سییه م: له سوپه ر مارکیتیک داوا له کاشیه ره کهی شته کانت بۆ بخاته کیسیکه وه، ئه و کاره که ده کات و بۆ کریاری دووهم رووی ده گۆرئ، تۆ پاره ده ده بیت و شته کانت هه لده گری بۆ ئه وهی برۆیت.

تۆ دهلیت ....

**Situation Four:** At the table in a restaurant a friend says, you have something on your face.' You ask where. Your friend tells you. You rub your face and ask, 'Is it off?' your friend says that it is.

**You would say:.....**

حاله تی چواره م: له سه ر میزیک له چیشته خانه یه کییک له هاوری کانت ده لیت، تۆ شتییک به دم و چاوته وه یه، تۆ ده لی کوئ؟ تۆ دهمو چاوت ده سپری و ده لی لیبوو یه وه ئه ویش ده لی به لی.

تۆ دهلیت .....

**Situation Five:** You find yourself in sudden need of money--\$500. You mention this to a friend. Your friend immediately offers to lend it you. At first you say, 'Oh no, I didn't mean it as a request. I couldn't take it.' Your friend says, 'Really, it's all right. What are friends for?' Your friend insists again, and you take the check.

**You would say:.....**

حاله تی پینجه م: له ناکو پنیوستت به ۵۰۰ دۆلار ده بیت، ئه مه له لای هاوری کت باس ده کهیت، ئه ویش راسته وخۆ پیت ده دات، تۆش له سه ره تا ره تی ده که یته وه، ده لی "نه خیر، ناتوانم وه ریگرم." هاوری کهت ده لیت "به راستی زۆر ئاسایه ئه ی هاوری بۆ هاورییه" هه ر سوور ده بی له سه ری تۆش وه ری ده گری.

تۆ دهلیت .....

**Situation Six:** You are studying in another city. Both you and your roommate work. You come home late from work and find that your roommate has done some work around the house that you had promised to do, but had not had a chance to do.

**You would say:.....**

حاله تی شه شه م: تۆ له شاریکی تر ده خوینی. تۆ و هاوریکهت که له گهلت له ژووره وهیه کار ده کهن. تۆ درهنگ ده گه ریته وه له کار، ده بیینی که هاوریکهت به شیکی زۆری کاره کانی کردوو که تۆ به لیت دابوو بیانکهیت.

تۆ ده لییت....

**Situation Seven:** Your friend suggests going out to lunch. You say that you'd like to go, but you only have \$2. Your friend says, 'Ah, don't worry. I'll treat you today.' Your friend takes you to a very nice restaurant – a much more expensive one than you usually go to. You have a wonderful meal. Your friend pays, and you get up to leave.

**You would say:.....**

حاله تی هه وته م: هاوریکهت پیشنیار ده کات که بچن بۆ نانی نیوه پۆ. تۆ ده لییت که تۆش ههز ده کهیت به لام ته نها دوو دۆلارت لایه. "ئه ها. نیگه ران مه به" هاوریکهت ده تباته چیشته خانه یه کی زۆر باش. یه کیکی زۆر گرانتتر له وهی که تۆ زۆر به ی جار سهردانی ده کهیت. تۆ ژه میکی زۆر باش ده خویت. هاوریکهت پاره که ده دات و تۆش هه لدهستی که ئه وی جییلی. تۆ ده لییت....



# Noticing: Its Impact on Adult Users of English in a Non-Native Context

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## Abstract

This paper presents one perspective of the conversation on noticing. It investigates the noticing experience of adult users of English in a non-native context. The respondents were forty final-year undergraduate students majoring in Accounting in a public tertiary institution. A questionnaire, a short-written test, and post-test verbal report sessions were used to source empirical data to probe the respondents' own noticing experience of ten linguistic features. Values were generated to approximate and represent the respondents' noticing experience, implicit knowledge, and their explicit knowledge of the linguistic features investigated. The study reveals that adult users of English in second language contexts may possess implicit knowledge of linguistic features they had not previously noticed, but they need to notice in order to have explicit knowledge of linguistic features. The study concludes that second language learners usually learn what they have first noticed, and that which has been noticed usually results in learning.

**Keywords:** Noticing, Noticing Experience, Noticing Index, Implicit Knowledge Index, Explicit Knowledge Index

## 1. Introduction

The Noticing Hypothesis has been discussed widely in the second language literature for about three decades, and it continues to attract empirical and theoretical research across the globe, engendering both support and controversy. Among questions raised is the issue of validity of the hypothesis itself. Some researchers, mostly applied linguists, are clear in their minds that Schmidt's (1990, 2010, etc.) works on the hypothesis have proved seminal. For example, Ellis (2015:151) acknowledges the importance of noticing linguistic features and is concerned about how learners can be helped to notice grammatical forms in the second language input. Other researchers, including Truscott (1996) and Carroll (2006), have issues with certain aspects of the hypothesis (refer to Section 2.2). Regrettably, however, none of the published discussions on the hypothesis is reported from Ghana, a multilingual post-colonial African country south of the Sahara.

The ultimate aim of this study, therefore, is to present a West African perspective of the conversation by examining the Noticing Hypothesis using data sourced from non-native adult users of English in Ghana with the

view of confirming or disconfirming the validity of the hypothesis. In order to achieve this ultimate aim, the following four objectives were pursued.

- i. To administer a short test to a group of final-year undergraduate students in a tertiary institution in Ghana on their familiarity with ten defined linguistic forms whose usage the respondents are supposed to have mastered in high school.
- ii. To find out whether or not the respondents had previously noticed the linguistic feature whose usage is being tested through the respective test item.
- iii. To see whether or not there is a correlation between items they found easy to execute and linguistic features they had previously noticed.
- iv. To harvest confirmatory data through post-test verbal report sessions.

Three research questions guided the realisation of the objectives listed above.

- i. Is the respondents' familiarity with the ten defined linguistic forms congruent?
- ii. Why were the respondents who rewrote the sentences correctly able to do so?
- iii. Is there any relationship between the sentences they could rewrite correctly and the linguistic features they had previously noticed?

## **2. Noticing: What is it?**

Noticing is a concept that has been defined variously in the second language literature and, in most cases, its meaning is somehow related to attention, observation, and awareness (Carr and Curran, 1994; Gass, 1988; James, 1890; Schmidt, 1990; Schmidt, 1995; Schmidt, 2001; Unlu, 2015; Williams, 2013). Noticing suggests distinguishing (sometimes with difficulty) something and recognising that thing for what it is, discriminating it from its competitors. Occasionally, noticing conveys the idea of understanding meanings and implications of that which has been noticed. The concept 'noticing' mostly implies becoming aware of something and paying attention to that thing. According to Ellis (2015:322), noticing is a "cognitive process whereby linguistic exemplars in the input that learners are exposed to are consciously attended to." Schmidt (2001:16) had earlier argued that "attention is necessary to understand virtually every aspect of second language acquisition."

In practical terms, noticing may denote the conscious (more or less) activity of observing or paying attention to a grammatical feature, and it has been associated with a variety of terms including focal awareness (Atkinson and Shiffrin, 1968; Kihlstrom, 1984), episodic awareness (Allport, 1979), and apperceived input (Gass, 1988). Each of these terms attempts to capture a particular level at which a linguistic element in a second language input may be perceived or experienced. Noticing, therefore, has to do with assigning of significance to a particular language feature such as tense, aspect, number, or person relative to others. Various learner characteristics (usually categorised as personal, academic, social, emotional, cognitive, etc.) may determine whether a learner may or may not notice a grammatical feature in the input encountered and different learners may have varying levels of motivation for noticing.

It is generally agreed among one camp of second language researchers that successful second language learning mostly involves noticing certain grammatical features of the second language input (Chi, 2018; Schmidt, 2010; Leow, 2013). According to Schmidt (1990:129), "noticing is the necessary and sufficient condition for converting input to intake." In other words, what learners notice in the second language input is what becomes intake for learning. This assertion is what has come to be known as the Noticing Hypothesis.

### **2.1. The Noticing Hypothesis**

The Noticing Hypothesis is generally considered "a theory of attention" (Ellis, 2015:182). It asserts that paying selective attention (or noticing) facilitates second language learning, and this implies that unattended learning (or non-noticing) is limited in relevance for second language learning. Schmidt (1990:132) stresses that noticing is a "private experience." He observes that although noticing can be operationally defined as "availability for verbal report," the lack of a verbal report cannot be taken as evidence of failure of noticing unless the report is gathered

either concurrently or immediately after the experience. Schmidt asserts that noticing “is the basic sense in which we commonly say that we are aware of something” (1990:132). In other words, “people learn about the things they pay attention to and do not learn much about the things they do not attend to” (Schmidt, 2010:721). Noticing, however, is not the end point of the process of experiencing insight and understanding. This is because, having noticed a particular feature in the input, the active learner can analyse it and compare it to what has been noticed on other occasions.

Schmidt (2001:5) describes what must be noticed in the second language input as “elements of the surface structure of utterances in the input – instances of language – rather than any abstract rules or principles of which such instances may be exemplars.” In a much later work, Schmidt (2010:721) elucidates “input does not become intake for language learning unless it is noticed,” that is, unless the grammatical feature in question is consciously registered. The Noticing Hypothesis has been very influential in the twin fields of second language learning on the one hand and second language teaching on the other hand. Most empirical studies, including Anahita, Karimi, & Mahmoodi (2016), Leow (1997, 2000), Izumi (2002), and Mackey (2006) provide evidence for it. Ellis (2015:182) confirms this when he says “the Noticing Hypothesis has informed research on the role of input and interaction.” Today, the hypothesis is regarded as a “mainstream SLA construct” (Yoshioka, Frota, and Berbsleithner, 2013:7) even though some aspects of the hypothesis have been criticised by some researchers including Carroll (2006), Gass (1997), Schachter (1998), Tomlin and Villa (1994), and Truscott (1998).

## 2.2. Some Objections and Counterpoints

One of the objections to the Noticing Hypothesis is the claim that attention to environmental stimuli does not play a direct role in acquisition because most of what constitutes linguistic knowledge is not in the input to start with. Researchers that hold this position, including Carroll (2006), doubt the idea that “input” for language learning is “something” objective and observable in the environment. They are of the opinion that the object of acquisition – phonemes, syllables, morphemes, nouns, verbs, cases, etc. – consists of mental constructs that exist in the mind and not in the environment at all. They argue that if these objects of acquisition are not present in the external environment, there is no possibility of noticing them. Carroll is of the view that acquisition is “not mediated by conscious awareness, explicit instruction, feedback, or correction” (Carroll, 2006:17). In response to the aforementioned criticism, Schmidt reminds his readers that “ideas about attention, noticing, and understanding are more compatible with instance-based, construction-based, and usage-based theories than with generative theories” (Schmidt, 2010:729).

Another objection is that raised by Gass (1997:16) which opposes the assertion that attention is a necessary condition for all learning. She explains that some types of learning do not even depend on input at all. Gass cites studies showing that ESL learners who are instructed on one type of relative clause performed well on other types of relatives that are higher in the relative clause accessibility hierarchy to explain her position that input on those constructions was not available to the learners in the study. She argues, “If no input existed, how could attention to input be a necessary condition for all aspects of learning?” To begin his response to Gass (1997), Schmidt appeals to his readers that the Noticing Hypothesis be more carefully reformulated (or be more carefully quoted). He then clarifies that the basic claim of the hypothesis is that, in order for input to become intake, it must be attended to and noticed. He contends, “if there are true cases where input is not needed for learning (which is attributed instead to UG or some other internal resources), the Noticing Hypothesis is irrelevant (or not applicable to those cases) rather than wrong.”

A related issue to the preceding criticism was raised by Schachter (1998) who argues that not all learning requires attention. She explains that although she is perfectly willing to agree that learning individual words (the lexicon), individual sounds (the phonetic inventory), and writing systems must be via attentional focus, she is not the least willing to say that learning phonological, morphological, and syntactic rules require this attentional focus (Schachter, 1998:574). In his response, Schmidt acknowledges that some studies on implicit learning claim that some forms of learning do not require attention; but he emphasises that the bulk of research supports the opposite assertion (Schmidt, 2010: 728).

These three preceding criticisms of the Noticing Hypothesis appear to emanate from one of two main classically opposed approaches to second language acquisition research, the Rationalist approach. Researchers with this orientation are identified by four main characteristics. First, they apply deductive reasoning in their approach. Deductive reasoning moves from generalised principles and statements into specific observed cases. So, deductive arguments are said to be either valid or not. Second, they insist that the brain has access to universal grammar at the inception of second language learning. They believe that the brain is filled with principles and parameters that support second language acquisition. Third, they claim that second language knowledge has an internal source, independent of experience, derived from the structure of the mind, and led by innate competence. And finally, they claim that language is acquired on the basis of a mechanism known as the language acquisition device which is placed somewhere in the brain.

Another opposition to aspects of the Noticing Hypothesis comes from Tomlin and Villa's (1994) Theory of Attention. One of the issues they raised is the claim that "detection and further processing of stimuli can be dissociated from awareness of what is attended to" (Tomlin and Villa, 1994:193). However, Schmidt (1995:18) is of the view that "it is difficult to distinguish among paying attention to something, noticing it, and being aware of it." In earlier publications, Schmidt (1990 and 1994) had consistently pointed out that focal attention and awareness are essentially isomorphic. This view of the concept "noticing," which is shared by the current researcher, is consonant with that expressed by Carr and Curran (1994:219). They emphasise that the three aforementioned activities often convey the same meaning. Carr and Curran explain, "If you are conscious of something, then you are attending to it ... and if you are attending to something, then you are conscious of it" (1994:219).

It is informative to observe that from his own assessment of these two SLA theories of attention, Ellis (2015:184) concludes that the Noticing Hypothesis can be considered a fuller account of the role of attention than that provided by Tomlin and Villa (1994). Ellis explains that "the main difference between the two theories lies in what happens when attention takes place." His view is that Tomlin and Villa (1994) did not say much about what learners do with the information they have detected; however, Schmidt's concepts of 'noticing' and 'noticing the gap' address not only detection but also what learners do with what they have detected. No wonder, Ellis (2015:181) remarks that Schmidt's work on attention "has proved seminal in SLA."

The criticism of the Noticing Hypothesis put forth in the review article by Truscott (1998) appears to be the fiercest. In that publication, Truscott raises several objections to the Noticing Hypothesis. He argues, for example, that the foundations of the hypothesis in cognitive psychology is weak and calls for a reformulation of the hypothesis to "noticing is necessary for the acquisition of metalinguistic knowledge but not competence." It is important to observe that, in his response to objections to the hypothesis, Schmidt (2010) however excludes the issues raised by Truscott; perhaps, Schmidt (2010) does not consider them important. For, he says, "I will only summarise some of the more important objections together with my responses" (Schmidt, 2010:727).

Schmidt (1995:21) observes that critics reviewing academic publications may somehow draw conclusions that are not in consonance with the contents of the article reviewed. Schmidt (1995:21) laments, "I find it surprising that these reviewers drew these conclusions ...". He explains, "Considering the Nissen and Bullemer article, those authors did not say themselves that there was little relationship between awareness as assessed by a questionnaire and performance on the primary task." Schmidt clarifies that what they said was "that in the single task repeating pattern (where learning was good) virtually all subjects reported noticing a sequence and that in the dual-task condition (where no learning occurred) virtually no subjects reported noticing a sequence" (Schmidt, 1995:21).

Also, Ferris (1999) reports that, usually, opponents of a proposition or a hypothesis may not accurately present the expressed position of the opposed side. She writes that she usually tasks pre-service teachers in her TESOL graduate course to read a review article, observing the key studies cited by the reviewer, and then to compare their own reading of the original sources with the statements made by the reviewer. Ferris stresses, "this exercise is always very illuminating. More often than not, the reviewer has under- or over-stated the findings and claims of the original studies to suit his or her own generalisations or arguments" (Ferris, 1999:4).

That is not all: Ellis (2006b:833) contests statements attributed to him by his critics. He says Sheen (2006) claims that "I argue that learners need no grammar instruction during the first year of learning. But this is not, in fact, how I addressed this issue". Also, Ellis (2006b:834) retorts "Again, I find that his summary does not correspond to my treatment of this issue. ... He raises an issue that I do not mention at all in this section". Furthermore, Ellis (2006b:835) replies "he claims that I argue that traditional grammar teaching is not an acceptable option because it does not enable learners to acquire implicit knowledge. I fail to find where in the article I have made this assertion, nor, in fact, does it correspond to my belief".

Furthermore, in his response to Swan and Welter (2006), Ellis (2006b:839) argues "I am accused of a dismissive and inaccurate portrayal of the principles and practice of pedagogic grammarians. But where in my article did I ever do this? In fact, I do the opposite". There were times that Ellis was furious in his response to critics who misrepresent his views. On one occasion, Ellis (2006b:833) replies his critic "I must admit, then, to some disappointment that when confronted with yet another response from Ron Sheen, which extracts from my article those statements that he, from his rather narrow perspective, object to, without any acknowledgement point-counterpoint of my own presentation of the issue". This state of affairs where a researcher is portrayed as displaying a rather narrow perspective of a proposition is not new. About two decades earlier, Ellis (1994:168) decides to respond to his critics in an uncharitable manner. He writes, "In short, Robinson's claim is a reflection of his own ignorance of Bialystok's early work (his confusion)." Ellis (1994:168) interprets Robinson's claim as "a failure to recognise the importance of distinguishing knowledge and learning in discussions of the explicit/implicit distinction."

The current researcher's own observation is that this state of affairs usually results in interesting and insightful academic debates. For example, Truscott's (1996) review article 'The case against grammar correction in L2 writing classes' has generated several debates, involving many second language acquisition researchers, and resulting in numerous publications including (Bitchener, 2008), (Bitchener & Knock, 2009a, 2009b, 2010), (Brown, 2012), (Chandler, 2003, 2004, 2009), (Ellis, 2010), (Ellis, Sheen, Murakami, & Takashima, 2008), (Ferris, 1995, 1999, 2004, 2006, 2007, 2010), (Ferris & Roberts, 2001), (Ferris, Liu, Sinha, & Senna, 2013), (Frear, & Bitchener 2015), (Sheen, 2010), (Truscott, 1996, 1999, 2007, 2009, 2010).

In Truscott's (1998) criticism of the Noticing Hypothesis, for example, he writes that 'the Noticing Hypothesis is the claim that second language learners must consciously notice the grammatical form of their input in order to acquire grammar' (1998: 103). But this representation seems inaccurate. The different renditions of the Noticing Hypothesis as expressed by Schmidt himself include "noticing is the necessary and sufficient condition for converting input to intake"(1990:129); "intake is that part of the input that the learner notices" (Schmidt, 1990:139); "what learners notice in input is what becomes intake for learning" (Schmidt, 1995:20); "People learn about the things they attend to and do not learn much from the things they do not attend to" (Schmidt 2001:30); "input does not become intake for language learning unless it is noticed" that is, unless it is "consciously registered" (Schmidt 2010:721). These five different renditions convey a central idea, and this idea is inconsistent with that conveyed in Truscott's quote of the hypothesis.

### **2.3. A Major Source of Debate**

There are various reasons why researchers may disagree over a theoretical or a practical issue. Lack of consensus on definitions of key terminologies used in the second language literature is one of the sources of debate among researchers. It is not doubtful that the two different positions held by Schmidt and his supporters on the one hand and critics of the hypothesis on the other hand can be likened to the two sides of the same coin; whereas Schmidt, in the case of noticing, was talking about "learning", his critics were talking about "acquisition". Surprisingly, the implications of these two terms have long (about four decades ago) been provided in the second language literature by Krashen (1977, 1981, 1982), Bialystok, (1978, 1980), and Ellis (1994, 2005, 2006a). For example, Krashen (1981) asserts that the basic premise of the acquisition-learning hypothesis is that language acquisition, on the one hand, and language learning, on the other hand, involve separate processes. Krashen (1981:1; 1982:10) assumes that adult second-language learners have two independent means for developing ability in second languages: one way is through acquisition and the other through learning.



According to Krashen (1981), language acquisition is very similar to the process children use in picking up first and second languages. "It requires meaningful interaction in the target language – natural communication – in which speakers are concerned not with the form of their utterances but with the message they are conveying and understanding" (Krashen 1981:1). Krashen (1982) explicates that language acquisition is a subconscious process and language acquirers are not usually aware that they are acquiring language. They are only aware that they are using the language for communication. Krashen asserts that "We are generally not consciously aware of the rules of the languages we have acquired (1982:10)". He explains that, instead, we have a 'feel' for correctness and that "grammatical sentences *sound* right, or *feel* right; errors *feel* wrong even if we do not consciously know what rule was violated" (Krashen, 1982:10). So, the process of language acquisition leads to 'acquired linguistic competence' and this is attained through natural interaction and meaningful communication.

From Krashen's perspective, the second way by which adults could develop competence in a second language is by language learning. Language learning refers to the 'conscious process that results in "knowing about" language' (Krashen, 1985:1). Krashen (1982:10) defines language learning as "Conscious knowledge of a second language, knowing the rules, being aware of them, and being able to talk about them." According to him, "in non-technical terms, learning is *knowing about* a language, known to most people as *grammar* or *rules*. Some synonyms include formal knowledge of a language or explicit learning" (1982:10). In Krashen's view, the acquired system is used to produce language; it generates utterances because, in producing language, acquirers focus on meaning, not on form. The learnt system serves as an 'editor' of the acquired system; it checks to ensure the correctness of the utterance against the knowledge in the learnt system.

Closely related concepts to *acquired knowledge* and *learned knowledge* are *implicit linguistic knowledge* and *explicit linguistic knowledge* respectively distinguished by Bialystok (1978, 1980). According to Bialystok (1980:201), "implicit linguistic knowledge is the intuitive information upon which the language learner operates in order to produce responses (comprehension or production) in the target language." Information that is automatic and is used spontaneously in language tasks is represented in implicit linguistic knowledge. This view of the function of this knowledge type is not restricted to Krashen and Bialystok alone. Schmidt confirms that it is in the domain of implicit knowledge "that a language learner may claim that a sentence *sounds* or *feels* right, although no direct evidence for the correctness of the sentence could be cited" (Schmidt, 2010:202). Like Krashen, Bialystok (1980) ascribes only one function to the implicit linguistic knowledge source; it is a working system that contains all the information about the second language necessary for most spontaneous comprehension and production tasks.

Also, Bialystok (1980:202), like Krashen, asserts that "explicit linguistic knowledge contains all the conscious facts the learner has about the language." Evidence for this knowledge type is the ability to articulate facts about the language. These may include grammar rules, pronunciation rules, and vocabulary items. But unlike Krashen, Bialystok assigns the explicit linguistic knowledge source three functions. First, this knowledge source serves as a buffer for new linguistic data. (A buffer is a component of a system that stores information temporally while either dealing with the data or sending it to another component.) She explains that "New words or vocabulary items which are presented in a classroom or encountered in any other explicit situation would at first be represented in explicit linguistic knowledge (Bialystok, 1980:202). She further suggests that the information may become automatic and transferred to implicit linguistic knowledge after continued use. This view of the relationship between implicit and explicit knowledge is referred to as the interface position. Krashen holds the opposite view, the non-interface position, which asserts that the knowledge compartments are watertight.

Second, the explicit linguistic knowledge source serves as the store for information that is represented explicitly. Bialystok observes that "even native speakers will find that certain grammar rules or word meanings required some consciousness in order to be used correctly." She explains that native English speakers, for example, sometimes report the need for conscious attention in order to properly differentiate "lie" and "lay." Third, the explicit linguistic knowledge source serves as "explicit articulatory system." In other words, linguistic data represented in implicit linguistic knowledge may be made conscious, or explicit, in the explicit linguistic knowledge source. Bialystok notices that "rules which are used implicitly and operated upon correctly may be

generated and the explicit statement of them brought into the explicit linguistic knowledge source if required. It is worth noting, according to Bialystok, that it is possible for any information to be represented in either source and that the levels of any two-second language learners' linguistic knowledge associated with the two sources may vary greatly. She explains that "a larger explicit linguistic knowledge source is associated with extensive knowledge of formal aspects of the language but does not necessarily imply an ability to use this information effectively" (Bialystok, 1980:203).

Consonant with views on acquisition, learning, explicit knowledge, and implicit knowledge expressed by researchers such as Krashen (1977, 1981) and Bialystok (1978, 1980), Ellis (2006a:95) presents explicit knowledge as consisting of the facts that speakers of a language have learned which facts may relate to the various aspects of language including grammar. Ellis observes that "explicit knowledge is held consciously, is learnable and verbalisable, and is typically accessed through controlled processing when learners experience some kind of linguistic difficulty in using the L2." Conversely, "implicit knowledge is procedural, is held unconsciously, and can only be verbalised if it is made explicit" (Ellis, 2006a:95). Ellis, like Bialystok and Krashen, observes that implicit knowledge is accessed rapidly and easily and thus is available for use in rapid, fluent communication.

Another example to illustrate the point that lack of consensus on definitions is one of the causes of debate in the second language literature is how the terms *input* and *intake* have been interpreted and used. Corder defines input as follows: "Input is what goes in, not what is available for going in; and we may reasonably suppose that it is the learner who controls this input, or more properly his intake" (Corder, 1967:165). Corder does not tell us the term for 'what is available for going in'; it appears he uses *input* and *intake* interchangeably to mean what Schmidt has consistently referred to as *intake*. However, Krashen (1981:102) defines intake as 'that subset of linguistic input that helps the acquirer to acquire language.' He uses the term *comprehensible input*. Krashen, therefore, considers *intake* synonymous with his description of comprehensible input. So, for Krashen, what is available for going in is *input* and what actually goes in is comprehensible input. It is important to observe that not every input available may actually go in; only part of what is available may be processed in.

Schmidt (1990:139) elucidates these two terms when he hypothesised that "intake is that part of the input that the learner notices." In other words, input is what is available for going in, and *intake* is what actually goes in. Two decades later, Schmidt (2010:721) restates the hypothesis in negative terms as "input does not become intake for language learning unless it is noticed." It is clear that Schmidt is consistent with his distinction between these two terms; *input* is the universal set, and *intake* is a subset of *input*. The lack of consensus in the use of terminology in the field of second language acquisition research itself may stem from the fact that researchers come into this field with diverse conceptual orientations rooted in different disciplines including education, linguistics, applied linguistics, psychology, educational psychology, biology, sociology, anthropology, communication studies, and physics. Bringing with them a wide range of perspectives, researchers with varied backgrounds will certainly disagree on many issues. The long theoretical review in this section is purposeful.

## 2.4. Empirical Studies

The rest of this section briefly reviews two empirical studies as a way of situating the current study in perspective. The first discusses noticing explicitly, but the second does not. Using undergraduate students majoring in English in a Brazilian university as respondents, Frota and Bergsleithner (2013) investigated the impact of classroom instruction on noticing. They wanted to know whether undergraduate English major students were likely to notice instances of a specific target structure in written input after receiving explicit instruction about such structures. English constructions investigated were structures involving pre-modified English nouns. A short pre-test was administered to the research participants to determine whether they were already sensitive to the occurrence of pre-modifying nouns which are common in English but rare in Portuguese, the participants' mother tongue. Then, the participants received explicit instruction on English pre-modifying nouns. Subsequently, two recognition tests were administered to assess whether their sensitivity to the occurrence of such structures was enhanced by the treatment, one was administered immediately after the

teaching session and the other administered two weeks later. According to Frota and Bergsleithner (2013), the findings indicate that the hypothesis that instruction would lead to enhanced noticing was largely supported.

Using 150 final-year undergraduate students studying Linguistics in a tertiary institution in Ghana as respondents, Agor (2014) set out to investigate the students' intra-sentence writing difficulties. He conducted a thirteen-week pedagogical intervention where two classes of Level 400 students were constituted based on the students' own preferences to study *Syntax of English* or *Linguistics and Language Teaching*. An entry-behavior test was administered the first day of lectures to both classes, in part, to establish their actual English writing needs. Grammar topics involving specific linguistic features that undergraduate students are assumed to have mastered in high school but which are areas of challenge to them were included in the contents taught to the experimental group. The control group was taught the normal traditional contents of the course. By the end of the semester, a recognition test involving the specific linguistic features was administered to the two groups. The results indicate that the difference between the exit- and the entry-behavior mean marks of the control group ( $34.8\% - 31\% = 3.8\%$ ) is marginal, but that of the experimental group ( $89.4\% - 30.6\% = 58.8\%$ ) is huge. The study concludes that if actual English writing needs of ESL/EFL students are injected into their syllabus contents, standards in English writing among non-native learners will be enhanced.

Although the second empirical research, Agor (2014) was not explicitly set out to investigate noticing, issues relative to noticing could be inferred from the findings. For example, it follows from the findings of that study that formal instruction promotes noticing, and this observation is in tandem with the tenets of the noticing hypothesis. The two empirical studies reviewed above informed the research method deployed in the current study.

### 3. Method

Forty final-year undergraduate Business students studying Accounting in a public tertiary institution in Ghana participated in the study as respondents. As agreed upon, the institution remains anonymous. The respondents were made up of twenty male and twenty female. They were all Ghanaian and ranged between ages 23 and 44. They were randomly admitted to participate in the study, and each of them gave consent to serve as a respondent. The 40 were the first twenty men and the first twenty women who consented to participate in the study. All the respondents had studied English as a curriculum subject and also as a medium of instruction for over twelve years. They were functionally bilingual in English and at least one indigenous Ghanaian language, and for the purpose of anonymity, they have been named 1, 2, 3, up to 40. The data collected was to probe whether or not, prior to the administration of the test, the respondents had noticed certain defined linguistic features in the input and how their noticing experience would influence their performance on the test. These linguistic features correspond to ten intra-sentence writing issues identified in Agor (2014; 2018) as local undergraduate students' most prominent areas of challenge. These ten areas of challenge include left dislocation, sequence of tenses, discord in an embedded clause, proximity concord deviation, and misplaced modification. The rest are ambiguity, category restriction rule deviation, dangling modification, redundant prepositions, and omission of a preposition.

#### 3.1. Data Collection Instruments

Two main instruments were used to elicit information from the respondents: first, a questionnaire and a short test; and second, verbal reports. The questionnaire investigated the personal and linguistic background of the respondents, and the short test probed their familiarity with the ten grammatical features named above. The test paper was attached to the questionnaire and consisted of ten short sentences derived from undergraduate student essays. The ten sentences are unacceptable in formal written English. They are unacceptable because they are either morphologically, lexically, syntactically malformed or semantically unclear. Each of the ten sentences was followed by three blank lines lettered 'a,' 'b,' and 'c' at the left margin. On the line lettered 'a,' the respondents were required to state whether, in formal written English, the sentence is correct or incorrect. On the line lettered 'b,' they were to rewrite the sentence correcting all errors they could detect. On the line lettered 'c,' they were to

say whether or not they had ever attended to (i.e., noticed) the respective grammatical feature being tested. The questionnaire and the test were administered during lecture hours. The ten sentences contained in the test administered have been included in this paper as Appendix A. Verbal report sessions, the second main instrument deployed, provided a useful platform for harvesting post-test data. Data sourced through this means responded to research questions 2 and 3.

### 3.2. Data Analysis Techniques

Two main techniques were used to analyse and to present the data sourced. A test item analysis table was devised for analysing and presenting the responses supplied. This consists of rectangular cells arranged in columns and rows. The first column is headed *R* representing *respondents* and under this head are cells containing the numbers 1 to 40 representing the 40 respondents. Columns 2 to 11 are headed S1 to S10 and represent the ten sentences supplied in the test. Additionally, the column headed *SSC* shows the total scores obtained for stating whether the sentence is correct or incorrect, and that headed *SRC* signifies the total number of sentences re-written correctly by each respondent. Furthermore, the column headed *NFN* shows the number of grammatical features each respondent had noticed prior to the administration of the short test; and that headed *100%* provides the percentage score obtained by each respondent on the test. Since all the respondents were advanced learners of English, it is worth noting that these four final columns specifically demonstrate the respondents' noticing experience in respect of the linguistic features investigated.

Each of the cells that fall under Columns 2 to 11 consists of one of the following pair codes:  $\sqrt{\sqrt{}}$ ;  $\sqrt{x}$ ;  $\sqrt{-}$ ;  $x-$ ;  $--$  followed by either *y* (representing yes) or *n* (representing no). The pair codes preceding the 'y' or the 'n' are interpreted as follows:

- i.  $\sqrt{\sqrt{}}$  a correct choice made and an acceptable sentence re-written.
- ii.  $\sqrt{x}$  a correct choice made but an unacceptable sentence re-written.
- iii.  $\sqrt{-}$  a correct choice made but no sentence re-written.
- iv.  $x-$  an incorrect choice made and no sentence re-written.
- v.  $--$  no choice made and no sentence re-written.

Pair codes  $xx$ ;  $x\sqrt{}$ ; and  $-\sqrt{}$  have not been interpreted here because they are unrealisable in this context of analysis. Each of the ten sentences constituting the test is unacceptable. Therefore, the respondents were expected to answer the 'a' part of each item by stating that the sentence was incorrect and then to proceed to the 'b' part to rewrite the sentence correcting all errors detected. The 'y' or 'n' that follows each of the pair codes ( $\sqrt{\sqrt{}}$ ;  $\sqrt{x}$ ;  $\sqrt{-}$ ;  $x-$ ;  $--$ ) in each cell indicates whether or not the respondent had ever noticed the grammatical feature whose familiarity is being tested in the respective sentence. As required of them, respondents who stated that the sentence was correct did not attempt the 'b' part; they did not see any error to correct. So, each response indicating that the sentence was correct is represented by the pair code  $x-$  because the response to the 'a' part is wrong and the respondent did not attempt the 'b' part. The other issue is that, once the respondent failed to attempt the 'a' part, he did not attempt the 'b' part either. This situation is represented by the pair code  $--$ .

As part of the item analysis procedure, ratings for the respondents' *noticing experience*, *implicit knowledge*, and *explicit knowledge* relative to the grammatical rule applicable to each test item have been determined. These are presented in Rows 42, 43, and 44, beginning with *NI*, *IKI*, and *EKI*, respectively. The second technique employed was basic arithmetic procedures. These were used in calculating the figures associated with the data. The rationale for accessing and processing the data was partly to get local empirical information that would provide evidence to confirm or refute the efficacy of the Noticing Hypothesis. These techniques were used by Agor (2018) and were found extremely productive.

### 4. Analysis and Results

Each of the 40 respondents returned the questionnaire and test paper to the researcher completely or almost completely filled. All the items on the questionnaire were answered. Also, all the 'a' and the 'c' tasks of each test item were executed, but some of the 'b' tasks were left undone. The sets of information gathered were codified and presented in the form of a test item analysis table for interpretation and discussion. The test item analysis

table appears in this paper rather as Appendix B. Its inclusion makes it possible for readers to see all the relevant information at a glance. The analysis presented in the said table summarises the results and is interpreted subsequently on the basis of the ten language features investigated.

Sentence 1 is a left dislocated construction (refer to Appendix A). Dislocated sentences are not acceptable in formal written English. Twenty-five respondents said they had noticed this grammatical feature prior to the administration of the test and were familiar with its correct usage in formal written English. They said they already knew that the Ghanaian school variety of English does not permit dislocation of the kind investigated. The noticing index generated from this finding is 6.25. This means that 62.5% of the respondents had noticed this phenomenon in the English language input prior to taking this test. For implicit knowledge, 35 respondents made the correct choice; they indicated that the sentence under discussion is incorrect in formal written English. For explicit knowledge, 25 respondents rewrote correct sentences. This means that the respondents found the 'a' part of the question (stating whether the sentence is correct or incorrect) easier than the 'b' part (rewriting the sentence correcting all errors detected). Find below the formula used for generating indices for implicit knowledge, explicit knowledge, and noticing.

#### Implicit knowledge index:

$$\frac{\text{Correct choices made}}{\text{Total number of respondents}} \times 100 = \frac{35}{40} \times 100 = 87.5\%$$

#### Explicit knowledge index

$$\frac{\text{Acceptable sentences rewritten}}{\text{Total number of respondents}} \times 100 = \frac{25}{40} \times 100 = 62.5\%$$

#### Noticing index

$$\frac{\text{Respondents who had noticed}}{\text{Total number of respondents}} \times 10 = \frac{25}{40} \times 10 = 6.25$$

Sentence 2 is a task on sequence of tenses, and the findings are as follows: 23 respondents chose the correct option, and 7 rewrote the sentence correctly. Their implicit knowledge index of sequence of tenses is 57.5% and their explicit knowledge index is 17.5%. As regards noticing, 7 respondents said they had noticed this grammatical feature and were familiar with its usage. Therefore, their noticing index of sequence of tenses is 1.75. For Sentence 3, where the application of notional concord is required, 28 made the correct choice, 11 made wrong choices, and one student did not respond to the question. Also, 24 respondents rewrote the sentence but only 13 produced sentences that are grammatical. So, the implicit and the explicit knowledge indices generated are 70% and 32.5% respectively. On the issue of noticing, 13 respondents said they had noticed this grammatical feature in earlier input. The noticing index generated from this is 3.25. Sentence 4 calls for the application of the principle of proximity concord and results from this item are as follows: 30 respondents made the right choice, and only 2 rewrote sentences that are grammatical. Figures for implicit knowledge and explicit knowledge are 75% and 5% respectively. With regards to noticing, only 2 affirmed that they had previously noticed this grammatical rule. The noticing index generated, therefore is 0.5.

The issue with Sentence 5 is that the modifier is dangling. Fifteen made the correct choice, but none was able to rewrite a grammatically and logically valid alternative sentence. Indices for implicit knowledge and explicit knowledge are 37.5% and 0% respectively. The noticing index generated is 0.0 because all the respondents claimed they had never noticed this phenomenon in their previous input. Sentence 6 is a task on misplaced modifiers, and the findings are as follows: 25 respondents chose the correct option, and 12 rewrote the sentence correctly. Their implicit knowledge index is 62.5% and their explicit knowledge index is 30%. Figures for noticing are as follows: 12 respondents had noticed this grammatical feature and were familiar with its usage. This finding produced noticing index of 3.5. Sentence 7 investigated their familiarity with ambiguous constructions. It turned out that 29 chose the correct option and 24 rewrote acceptable sentences. These data generated implicit knowledge index of 72.5% and explicit knowledge index of 60%. The noticing index is 6.0 because 24 respondents had noticed this phenomenon in their previous input.

Sentence 8 probed their familiarity with the use of the adjective *mature*. The results show that 17 made the correct choice and 11 rewrote acceptable sentences. These generated implicit knowledge index of 42.5% and explicit knowledge index of 27.5%. The noticing index generated is 2.75 because 11 respondents had noticed this phenomenon in their previous input. For Sentence 9, where the respondents' familiarity with the use of the preposition *from* is investigated, 33 made the correct choice and 11 rewrote grammatically correct sentences. These generated implicit and explicit knowledge indices of 82.5% and 27.5% respectively. With regard to noticing, 11 respondents said they had noticed this grammatical feature in earlier input. The noticing index generated is 2.75. Sentence 10 investigated their usage of the verb *enable* and the results are as follows: 15 respondents chose the correct option, and only 2 rewrote the sentence correctly. Their implicit knowledge index is 37.5%, their explicit knowledge index is 5%, and their noticing index is 1.75. Part of the discussion session investigates possible correlation between the noticing index and the two knowledge indices.

## 5. Discussion

The object of investigation in this study is the level of noticing demonstrated by forty respondents in respect of ten linguistic features. The three research questions serve as the primary driving force for the deliberation in this section. The first research question sought to find out whether or not the respondents' familiarity with the linguistic features defined is congruent. As shown by the outcome of the test administered, the respondents had varied levels of familiarity with the linguistic features investigated. This is explained through the use of two complementary approaches: the number of features noticed by each respondent and the number of respondents who noticed each of the ten features investigated. Through these two windows, the respondents' noticing experience in respect of the defined linguistic features is subsequently brought into a clear perspective.

With regard to the number of respondents who had previously attended to the various linguistic forms, it was observed that some had noticed more than six of the features in the input; others had not noticed any of the ten linguistic features prior to the administration of the test. For example, four respondents claimed that they had never noticed any of the ten linguistic forms in the input, and nine affirmed they had noticed only one prior to the commencement of this study. The respondent who had noticed the highest number of features indicated that he had noticed seven of the features prior to taking the test. So, by assessing the number of features noticed by each of the respondents, the study reveals that the respondents had varied levels of familiarity with the said linguistic forms. As regards the number of respondents who had noticed each feature investigated, the study reveals that some of the features had been noticed more than others. For example, whereas 35 respondents affirmed to have noticed the linguistic form investigated in Sentence One, only 15 claimed to have noticed the feature investigated in Sentence Four. This research question therefore reveals that the noticing experience of the individual respondents in relation to the features investigated is dissimilar; the different features had been noticed variously. This observation confirms Schmidt's assertion that noticing is a "private experience" (1990:132). One important theoretical implication of this observation is that the basic method for determining linguistic features noticed by second language learners is through verbal report.

The second research question interrogates why some of the respondents were able to rewrite acceptable sentences and why others were unable to do so. It is observed that none was able to rewrite all the ten sentences correctly. The highest number of acceptable sentences rewritten by a respondent is 7, and only Respondent 1 exhibited this performance. According to Respondent 1, he had previously noticed in the input the linguistic features inherent in the seven sentences he rewrote correctly. He indicated that he had never encountered the topics involved in the three other sentences. He said this lack might have explained why he could not rewrite those three sentences correctly. This admission gives credence to Schmidt's (2010:721) conviction that "input does not become intake for language learning unless it is noticed". Another theoretical implication deducible from this admission and this conviction is that the concepts "input" and "intake" are not synonymous and cannot be used interchangeably in the field of second language learning as earlier suggested by Corder (1967:165). Rather, input is that linguistic data available for "going in," and intake is that subset of linguistic input that actually helps the acquirer to acquire a second language. In other words, input is what is available for going in and intake is what actually goes in. this observation is probably the genesis of Schmidt's Noticing Hypothesis

which is also rendered as “intake is that part of the input that the learner notices” (Schmidt, 1990:139).

The four respondents who could not rewrite any sentence correctly stated on the test paper that they had never been exposed to the linguistic features whose familiarity was tested through the sentences supplied. The backgrounds of the four respondents were similar; they claimed they never cultivated the habit of attending to linguistic forms in the input, and intimated that their personal attitudes might have resulted in their ‘score zero’ predicament. From the analysis, we observe that one of the four was able to detect that three of the ten sentences were unacceptable in formal written English while the other three made four correct choices. Through verbal report, they explained that they never had the opportunity to be taught the grammar of English explicitly; their pre-tertiary teachers of English only encouraged them to focus more on meaning than on grammatical forms when using the language. An obvious pedagogical implication of the negative effect of the absence of explicit grammar teaching to intermediate learners is lack of declarative grammatical knowledge. Many researchers (Anyidoho, 2002; Bialystok, 1981; Ellis, 1994) are of the view that explicit grammar teaching has a place in second language pedagogy. For example, items 1, 3, and 4 of Ellis’s (2005) *Principles of Instructed Language Teaching* support rule-based learning, focus on form and explicit linguistic knowledge development.

One fellow, Respondent 9, was able to detect that all the ten sentences were unacceptable in formal written English; and yet, he could rewrite only five sentences correctly. During the post-test discussion, he explained that, while in high school, he had the opportunity to attend to five of the features distributed in Sentences 1, 3, 6, 7, and 8. According to him, those were the five sentences he was able to rewrite correctly. He explained that he consciously learnt those forms after he had first noticed them in the input. This effort gives support to Schmidt’s (2010: 725) claim that “noticing is necessary for second language learning, and that understanding is facilitative but not required.” This respondent explained further that “I just had the ‘feeling’ that the other five I could not rewrite were also not good sentences; I had never encountered the correct forms of those structures, and that is why I could not rewrite them correctly.” This explanation is revealing and has relevant pedagogical implications. So, the reason why some of the respondents were able to rewrite the sentences correctly is that they had previously attended to the correct forms of those features in the input prior to the test; those who could not rewrite the sentences correctly failed to do so because they had not previously noticed those forms in the input.

The third research question sought to find out whether there is a direct relationship between the linguistic features that the respondents had previously noticed and the sentences they could rewrite correctly. In other words, it interrogates whether there is a correlation between the noticing index generated and the other two knowledge indices in respect of the linguistic features investigated: implicit knowledge index and explicit knowledge index. To facilitate this discussion, we approximate the respondents’ implicit knowledge of the linguistic features investigated to their ability to detect the correctness or otherwise of the ten sentences. Their explicit linguistic knowledge corresponds with their ability to rewrite the sentences correctly.

The study indicates that each respondent’s noticing index of each of the linguistic features investigated relates directly to the corresponding explicit linguistic knowledge index. For example, Respondent One, who indicated that he had noticed seven of the linguistic features previously, was able to rewrite those seven sentences correctly, no more no less. He pointed out during the post-test verbal report session that he rewrote seven sentences correctly because he had previously noticed the grammatical rules violated in those sentences. He further clarified that he could not rewrite correctly the sentences containing structures he had not previously attended to. Conversely, the four respondents, 19, 20, 35, and 37, for example, who claimed that they had never noticed the correct forms of any of the ten features, could not rewrite any of the sentences correctly. The four explained that they could not rewrite the sentences because they had not previously attended to the grammatical elements contained in those sentences. This means that because these four respondents had never noticed these features in the input, their noticing index in respect of the features was 0.0. It also means that because they could not rewrite any of the ten sentences correctly, their explicit linguistic knowledge was 0.0%. So, their noticing index coincided with their explicit linguistic knowledge index, and this direct connection between noticing and explicit knowledge is true for all the forty respondents in respect of the ten linguistic features investigated. The direct relationship between noticing and explicit linguistic knowledge observed in the current study further investigation. This observation, however, confirms Schmidt’s (2010: 721) assertion that “people learn about the

things they pay attention to and do not learn much about the things they do not pay attention to." A pedagogical implication derived from this observation is that, in second language contexts, intermediate learners should be equipped not only with procedural linguistic knowledge but they should be equipped with declarative linguistic knowledge as well because this knowledge enables intermediate second language learners to edit their own writings.

As regards the association between the respondents' noticing behaviour and their implicit knowledge, there appears to be no direct relationship observed. For example, the noticing index generated for both Respondents 3 and 18 is 1.0 but Respondent 3 recorded implicit knowledge index of 80% while Respondent 18 recorded implicit knowledge index of 40%. Also, the noticing index generated for Respondents 5 and 39 were 1.0 and 6.0 respectively even though they both recorded the same implicit knowledge index of 70%. So, the respondents' noticing index of each of the ten linguistic features is lower than the corresponding implicit linguistic knowledge index, and the difference between the two indices is narrow in the case of some respondents but wide in the case of others. This observation reflects the group analysis where the group's implicit linguistic knowledge index in respect of Sentence One, for example, is 87.5%, but its corresponding noticing index is 6.25; the indices in respect of Sentence Ten are 37% and 0.5 respectively. So, there appears to be no direct association between the respondents' noticing behaviour and their implicit knowledge in respect of the linguistic features investigated. This point also suggests that there are certain linguistic structures that people are able to use correctly but which structures they had not noticed in the input. This suggestion requires further investigation.

## 6. Conclusion

This paper sought to present one perspective of the conversation on noticing through the use of data sourced from adult users of English in Ghana. Both the research team and the respondents resolved to be resolute and neutral in their quest to source and to supply information required resulting in the findings and conclusions presented below. First, a direct relationship was observed between indices generated for noticing and those generated for explicit knowledge in respect of the linguistic features investigated, and this relationship is predictable; once the explicit knowledge index was given, the noticing index was predicted, and vice versa. The values observed are the same even though they appeared in two different forms; noticing indices appeared in decimal fraction while explicit knowledge indices appeared in percentage. However, a comparison of noticing and implicit knowledge indices showed no direct relationship; the figures appeared to be haphazard.

Second, in the midst of this chaotic relationship between noticing and implicit knowledge, it is observed that the implicit knowledge indices were constantly higher by unpredictable margins than those for noticing. This implies that acquisition is possible without noticing, but this may not necessarily be true for learning. Third, structures the second language learners were able to rewrite correctly were those that contained linguistic elements they had previously noticed. The study, therefore, concludes that early advanced learners of English in second language contexts have varied noticing behaviour patterns and experiences. Additionally, they may have implicit knowledge of linguistic features they had not previously noticed, but they need to notice in order to have explicit knowledge of linguistic features. Finally, the study suggests that second language learners usually learn what they have first noticed in the input, and that which has been noticed usually results in learning. These findings confirm the noticing hypothesis, the conviction that "input does not become intake for language learning unless it is noticed" (Schmidt's 2010:721). They also have implications for the teaching of English in second language contexts.

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## Appendices

### Appendix A: The Short Test Administered

In the space provided for each question:

- i. state whether the sentence is correct or incorrect in formal written English (1 mark).
- ii. rewrite only the incorrect sentence correcting any errors you detect (for 1 mark).
- iii. say whether or not you had previously noticed the grammatical feature being tested.

1. The Almighty God who started with you he will end with you.

- a. ....
- b. ....
- c. ....

2. The lecturer said he will travel tomorrow.

- a. ....
- b. ....
- c. ....

3. One of the people who tells lies about lecturers has been exposed.

- a. ....
- b. ....
- c. ....

4. Either the Directors of education or I are to blame.

- a. ....
- b. ....
- c. ....

5. After considering the proposal for two hours, it was rejected by the directors.

- a. ....
- b. ....
- c. ....

6. The meeting was held to arrange for the football match in the office.

- a. ....
- b. ....
- c. ....

7. It is strange that the shooting of the armed robbers provoked the politicians.

- a. ....
- b. ....
- c. ....

8. I think our son is now matured to marry.

- a. ....
- b. ....
- c. ....

9. All the students were compelled to vacate from the hall.

- a. ....
- b. ....
- c. ....

10. I thought a good university degree would enable me get a good job.

- a. ....
- b. ....
- c. ....

**8.1 Appendix B: Test Item Analysis Table**

R	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	SSC	ASR	NFN	100%
1	√√y	√xn	√√y	√√y	x-n	√√y	√√y	√√y	√√y	√xn	9	7	7	80
2	√√y	x-n	√√y	√xn	x-n	√√y	√√y	x-n	√√y	x-n	6	5	5	55
3	√√y	x-n	√-n	√-n	√xn	√-n	√-n	x-n	√-n	√xn	8	1	1	45
4	√xn	x-n	√-n	√xn	√-n	√-n	√√y	√-n	√-n	x-n	8	1	1	45
5	√-n	√xn	√-n	x-n	√xn	x-n	√√y	x-n	√xn	√xn	7	1	1	40
6	x-n	√√y	x-n	√xn	√-n	√xn	√√y	x-n	√-n	x-n	6	2	2	40
7	√√y	x-n	√xn	√xn	x-n	x-n	√√y	x-n	√xn	√xn	6	2	2	40
8	√√y	x-n	x-n	√-n	√xn	x-n	x-n	x-n	√xn	√xn	5	1	1	30
9	√√y	√xn	√√y	√xn	√xn	√√y	√√y	√√y	√xn	√xn	10	5	5	75
10	√√y	√xn	√√y	√xn	x-n	√√y	√√y	√√y	√xn	√xn	9	5	5	70
11	√√y	√xn	√√y	x-n	x-n	√√y	√√y	√√y	√xn	√xn	8	5	5	65
12	√√y	x-n	√√y	√xn	x-n	√xn	√√y	x-n	√√y	√√y	7	5	5	60
13	√√y	√√y	√√y	--n	√xn	√xn	√√y	x-n	√√y	x-n	7	5	5	60
14	√xn	√√y	√xn	x-n	√xn	x-n	x-n	x-n	√xn	x-n	5	1	1	30
15	√√y	x-n	x-n	√xn	x-n	x-n	√√y	√xn	x-n	x-n	4	2	2	30
16	√xn	x-n	√xn	√xn	--n	√√y	√xn	--n	--n	--n	5	1	1	30
17	√√y	√xn	x-n	√xn	x-n	√√y	√√y	√√y	√√y	x-n	7	5	5	60
18	x-n	√xn	x-n	x-n	x-n	√xn	x-n	√√y	√xn	x-n	4	1	1	25
19	√xn	x-n	√xn	√xn	x-n	x-n	x-n	x-n	√xn	x-n	4	0	0	20
20	x-n	x-n	√-n	√xn	√-n	x-n	x-n	x-n	√xn	x-n	4	0	0	20
21	√√y	√√y	√xn	√xn	√-n	x-n	x-n	x-n	√xn	√xn	7	2	2	45
22	√√y	x-n	√xn	√xn	√xn	x-n	√√y	x-n	√xn	x-n	6	2	2	40
23	√√y	√xn	√xn	x-n	x-n	√xn	x-n	√√y	√xn	x-n	6	2	2	40
24	√√y	√√y	x-n	√xn	x-n	√xn	√√y	√xn	√√y	√xn	8	4	4	60
25	√xn	√xn	√√y	√xn	x-n	√√y	x-n	√xn	√√y	x-n	7	3	3	50
26	√√y	√√y	x-n	x-n	√xn	√√y	√√y	√-n	x-n	x-n	6	4	4	50
27	√√y	√xn	√√y	√xn	x-n	x-n	√xn	x-n	√xn	√xn	7	2	2	45
28	√√y	x-n	√√y	x-n	√xn	x-n	x-n	√√y	√√y	x-n	5	4	4	45
29	√xn	√√y	√xn	√xn	x-n	x-n	√√y	x-n	x-n	√√y	6	3	3	45
30	√√y	√xn	x-n	x-n	x-n	√√y	√√y	√√y	√xn	x-n	6	4	4	50
31	√xn	x-n	√√y	√√y	x-n	√xn	√√y	√xn	√xn	x-n	7	3	3	50
32	√√y	x-n	√xn	√xn	x-n	√xn	√√y	x-n	√xn	x-n	6	2	2	40
33	√xn	x-n	√xn	√xn	x-n	√xn	√√y	x-n	√xn	x-n	6	1	1	35
34	x-n	√xn	√xn	√xn	x-n	x-n	√√y	x-n	x-n	√xn	5	1	1	30
35	√xn	√xn	x-n	√xn	√xn	x-n	x-n	x-n	x-n	x-n	4	0	0	20
36	√√y	√xn	x-n	√xn	x-n	√xn	√xn	x-n	√√y	x-n	6	2	2	40
37	x-n	√xn	x-n	x-n	√xn	√xn	x-n	x-n	x-n	x-n	3	0	0	15
38	√√y	√xn	--n	√xn	x-n	x-n	√xn	x-n	√√y	√xn	6	2	2	40
39	√√y	x-n	√√y	√xn	x-n	√√y	√√y	√√y	√√y	x-n	7	6	6	65
40	√√y	x-n	√√y	√xn	x-n	√√y	√√y	√√y	√xn	x-n	7	5	5	60
<b>NI</b>	<b>6.25</b>	<b>1.75</b>	<b>3.25</b>	<b>0.5</b>	<b>0</b>	<b>3.0</b>	<b>6.0</b>	<b>2.75</b>	<b>2.75</b>	<b>0.5</b>	<b>6.25</b>	<b>2.68</b>	<b>2.68</b>	<b>44.63</b>
<b>IKI</b>	<b>87.5</b>	<b>57.5</b>	<b>70</b>	<b>75</b>	<b>37.5</b>	<b>62.5</b>	<b>72.5</b>	<b>42.5</b>	<b>82.5</b>	<b>37.5</b>				
<b>EKI</b>	<b>62.5</b>	<b>17.5</b>	<b>32.5</b>	<b>5</b>	<b>0</b>	<b>30</b>	<b>60</b>	<b>27.5</b>	<b>27.5</b>	<b>5</b>				