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### GR-IDEA: An Innovative Model of Mentoring in Adult Education

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#### Abstract

The various models of mentoring presented in the international literature can be placed into two main categories, namely, those based on behaviourism which support knowledge transmission, and those based on constructivism which support knowledge transformation. The model presented in this paper is based on constructivism and it has been developed as a supporting practice of adult educators. The two dimensions Group and Reflection are the pillars of the model, while its key components, which are at the same time developmental stages, are: Inspiration, Development, Empowerment, and Action.

Keywords: Mentoring, Adult Education, Group, Reflection, Inspiration, Development, Empowerment, Action

#### 1. Introduction

#### 1.1 Models of Mentoring

Mentoring is in essence a learning process, which adheres to a diverse range of models, is based on different theoretical foundations (Koutsoukos, 2021). A critical examination of the international literature on the various mentoring models reveals that they basically fall into one of two approaches; namely the behaviourist or the constructivist. Needless to say, the former endorses the transmission of knowledge, where there is a clear differentiation between the mentor/mentee roles, whereas the latter supports the transformation of knowledge, where the mentor/mentee roles take place in a reflective, collaborative context and are characterized by equality (Schon, 1987; Tang & Choi, 2007).

More specifically, behaviourism implements a technocratic model to teaching, where the mentor is the knowledge supplier and the mentee is the "apprentice" who acquires the knowledge and skills (which are procedural) in order to be able to effectively perform the job. The mentor has the upper hand in the relationship, not only through the provision of theoretical knowledge and practical knowhow, but through control and assessment as well, while the mentee, through observation and emulation, learns to perform set tasks and duties (Jones, 2009). Obviously, in this case, mentor instruction and mentee learning are carried out through linear practices, subject to assumptions and goals at both a theoretical and institutional level (Collins, 1991; Rogers, 1996; Day, 1999). This traditional form of teaching, which Freire (1970) refers to as the "banking model of education" means that the mentor-expert

"deposits" knowledge, which more often than not is based on personal experiential bias or theoretical assumptions, obstructing the achievement of Freire's "freedom through learning" (Illeris, 2007), as the mentee-learner's self-judgment and self-efficacy are significantly impeded. At times, behavioural-based models have been accused of having overly simplistic teaching/learning assumptions and are criticized by some for their strict adherence to the way knowledge is transmitted, as they implement neither problem- nor action-oriented learning practices (Kwo, 1994; Tomlinson, 1995; Rice, 2007).

On the other hand, constructivism applies a dynamic, adaptable, learner-centered, interactive teaching model, where mentoring is a proactive rather than reactive approach to professional development for both mentors and mentees (Hargreaves & Fullan, 2000). In a democratic environment where a relationship of mutual trust is fostered, mentees are assisted to engage in reflective practices in order to recognize their (dys) functional or biased mental attitudes and behaviours, develop problem-solving strategies, and reconstruct their reference frames, perceptions, and actions through collaborative dialogues (Koutsoukos & Sipitanou, 2020) The mentor in the role of critical collaborator facilitates the learning process with the aim of encouraging the mentee to become a responsible, autonomous professional who constructs their own knowledge instead of merely adopting established traditional theories and practices. (Schon, 1987; Tang & Choi, 2007)

#### 1.2 Mentoring and Adult Education

Adult education can provide a theoretical foundation for mentoring, the application of which uses the theoretical knowledge of adult learning (Cox, 2006). For instance, the "instructional support" advocated by behavioural models, reflected in Kram's (1983) and Noe's (1988) initial conception of mentoring, can be linked to the area of learning which Mezirow (2000) calls "instrumental knowledge" and which refers to the acquisition of technical knowledge. The perception of role modeling being a part of mentoring (Scandura & Ragins, 1993) can be linked to the area of learning called practical or communicative knowledge, which refers to the learner's ability to negotiate his or her own meanings and emotions (Cranton, 2006).Finally, reflective mentoring models can be associated to emancipatory knowledge, which includes both instructional and communicative learning, but focuses on learning through a critical approach to both the self and the environment, as well as one's ability for self-reflection and self-determination (Mezirow, 2000).

A key feature in adult learning is the experiences that each adult brings to the learning process. Experiences -direct or indirect- and their meaning are a central point of reference in the theory of adult education. However, it must be kept in mind that not every experience necessarily leads to learning. When the individual does not reflect on their experience, then a situation of either non-learning or non-reflective learning is created. Real learning only takes place when the individual analyzes and contemplates on their experience. This constitutes a higher form as it is what is termed reflective learning (Jarvis (2005), and it is then that skills are developed which can produce a new or revised interpretation of an experience (Mezirow, 2000).

Experiences and reflection are characteristics of adult learning and constitute a point of osmosis in the fields of adult education and mentoring. In accordance with the theory of adult education, instead of simply providing it, the mentor leads mentees to discover new knowledge based on their previous knowledge (Knowles, 1998). It is in this way that the systematic processing of experience becomes a catalytic tool which the mentor-trainer can use to encourage mentee-learners to consciously and critically reflection their assumptions (Mezirow, 2000). In both the theory of adult education and the theory of mentoring, the educational value of experience is generally well accepted, since knowledge is acquired through reflection on one's experiences, generating, on the one hand, ideas that lead to new action (Kolb, 1984), and on the other, hypotheses that can be verified on new experiences (Rogers, 1996).

The framework for developing a mentoring process, which incorporates self-directed learning approaches, and thus releasing learning from the bonds of traditional methods, such as mnemonics, explicit teaching, etc., is based on the notion that knowledge is created by reflecting on one's experiences, the aim of which, one the one hand, is to ideas for action, and on the other, to gain a better understanding of the new experiences that follow (Kolb, 1984; Rogers, 1996).On this basis, mentoring is linked to Knowles' theory of andragogy, and at the same time is related

to the student-centered learning of Carl Rogers' humanistic theory in education. It also includes processes of critical thinking and revised action related to Mezirow's transformational learning and Freire's social action (Illeris, 2007). On account of the emancipatory dimension they accord adult education, these approaches are predominant in the search for a theoretical mentoring framework (Hansford, Tennent &Ehrich, 2003; Furlong & Maynard, 1995). The concept of freedom, in its various dimensions, is the focal point of this framework (Boud, Keogh & Walker, 2002), i.e., freedom as learners (Knowles, 1980), freedom to learn (Rogers, 1996), and freedom through learning (Freire, 1970; Mezirow, 2000).

#### 2. Method

#### 2.1 Research Methodology

The aim of the study was to present a study aimed at exploring Greek adult educators' views on mentoring, and from their responses develop a model of mentoring as a tool to support their teaching work. The proposed GR-IDEA mentoring model for the instructional guidance of adult educators is in line with the principles of adult education.

The research questions were the following:

- Do adult educators show a desirability for instructional guidance?
- How do adult educators perceive mentoring?
- What are adult educators' views on the design of an integrated mentoring model to support their teaching work?
- Do the views of adult educators differ depending on their age, experience in adult education and EOPPEP accreditation?

After having taken into consideration all the alternatives in conjunction with the needs of the study, gradual sampling was selected as the most appropriate sampling method, and the sample size was determined at 300 adult educators.

An online questionnaire based on the research questions was developed, whose aim was to collect data on the views of adult educators the responses of whom were closed questions on a five-point Likert scale, with 1 being the least value and 5 the most (Robson, 2010). The questionnaire was pilot tested on 50 adult educators, and its reliability and validity were checked. After the relevant adjustments, the final version was built through the Google Drive platform. Three hundred and thirty-seven (337) questionnaires were completed, which was a satisfactory Response Rate of 82.6%, in accordance with the relevant literature (Groves, 2006). Statistical analysis was conducted using the Statistical Package for Social Sciences (SPSS 21). In the processing and analysis of the data, a reliability analysis of the questionnaire was performed by calculating Cronbach's alpha reliability coefficient, as well as exploratory factor analysis and comparisons.

#### 3. Results

Table 1 shows the characteristics of the study participants. It can be clearly seen that they not only have different scientific backgrounds, but also different knowledge and experience in adult education, and obviously different teaching needs. The largest group consists of accredited adult educators (73.6%), which was expected since, according to current legislation, accredited educational competence is now a prerequisite for employment as an educator in non-formal education programs (Law 4485/2017). They have a relatively high mean age (45.1% are in the 46-55 age group, followed by 43.6% in the 36-45 age group), however, relatively little experience as adult educators. More specifically, while over half (53.7%) have 1-10 years of experience as adult educators, over a third (37.1%) have 11-20 years' experience. This indicates that teachers in Greece do not tend to enter the field of adult education immediately on completion of their studies, but only after having gained experience in other places of work. This finding is in agreement with that of a relevant study in EU countries, according to which adult educators have 10-15 years of professional experience in other jobs before turning to the teaching of adults (Buiskool, Broek, Van Lakerveld, Zarifis & Osborne, 2010).

Table 1: The demographic profile of adult educators						
Gender	Males: 128 (38%)	Females: 20	9 (62%)		Total: 33	7 (100%)
Age Groups	25-35 36		6-45	46-55		Total
	38 (11.3%)	147 (	(43.6%)	152	(45.1%)	337 (100%)
Postgraduate Studies	Master's Degree		Doct	oral D	Degree	Total
	Yes: 192 (57%) No	o: 145 (43%)	Yes: 18 (5	5.3%)	No: 319 (94.7	%) 337 (100%)
Years of service in Adult	1-10	11-20	21-30	)	>30	Total
	181 (53.7%)	125 (37.1%)	28 (8	.3%)	3 (0.9%)	337 (100%)
EOPPEP Accreditation	Yes: 248 (73.6%)	No: 89 (26.4	%)			Total: 337 (100%)

Next, participants were asked to rate how important six given factors describing the desired relationship with a mentor were (Lankau & Scandura, 2002; McDonald& Flint, 2011; Rippon & Martin, 2003; Rogers, 1996). As can be seen in Table 6, the three factors that were rated at an aggregate score of over 90% by the overwhelming majority of participants as to what the mentor-mentee relationship should be based on were the following: two-way cooperation and interaction at an aggregate of 95.3% (66.8% and 28.5%, respectively; with another 4.2% moderately important); mutual respect at an aggregate of 94.6% (69.7% and 24.9%, respectively; plus 4.5% moderately important); and empathy at an aggregate of 92.6% (62.6% and 30.0%, respectively; with another 6.2% moderately important). It is interesting to note that for all three factors no participant rated them as not important at all, while they were rated as slightly important by only 0.6%, 0.9%, and 1.2%, respectively. This was followed by the factors: transfer of knowledge at an aggregate of 74.8% (47.5% and 27.3% respectively, with another 19.0% moderately important). The lower rating given to the transfer of knowledge from mentor to mentee indicates that many adult educators do not prefer linear learning of professional skills (Collins, 1991; Day, 1999; Rogers, 1996).

The factor equal partners at an aggregate of 67.4% (which was almost equally divided by extremely important at 36.2% and very important at 31.2%, with another 23.4% moderately important) were next. It would, thus, appear that adult educators perceive not only the mentor but also themselves as mentees, as a source of knowledge which can best be utilized only in an equal relationship (Brookfield, 2006). Lastly, the factor hierarchical mentoring was divided into almost equal thirds at an aggregate of 32.6% rating it as extremely and very important (15.4% and 17.2%, respectively); a slightly higher 32.9% stating it was moderately important; and finally, a little higher still at an aggregate of 34.5% rating it as slightly or not important at all (21.1% and 13.4%, respectively). The fact that participants expressed a low importance of hierarchical mentoring, meaning they were negatively inclined towards the existence of contemporary hierarchical leadership approaches to mentoring practice, is in line with the literature findings, according to which hierarchical relationships: prevent the mentee from becoming actively involved in the process, hinder the exchange of opinions, impede learning (Brown, Pryzwansky & Schulte, 2001), and often destroy the sense of mutual trust that should underpin the mentoring relationship (Ambrosetti & Dekkers, 2010). Finding that almost a third of participants rated hierarchical mentorship as moderately important (32.9%), indicates that a substantial portion of adult educators hold a more traditional view of mentoring roles (Mc Connell & Geesa, 2019). A possible explanation for this might be that these adult educators have experienced forms of education where hierarchical roles were prevalent.

Overall, study participants stated that the key components of a desirable mentoring relationship are a two-way cooperation and interaction and mutual respect between mentor and mentee, as well as empathy on the part of the mentor towards the mentee, findings which are consistent with previous research (Terrion Leonard, 2007; Eller, Lev & Feurer, 2013).

Factor	Not important	Slightly	Moderately	Very important	Extremely
	at all	important	important		important
Mutual respect	-	0.9%	4.5%	24.9%	69.7%
Empathy	-	1.2%	6.2%	30.0%	62.6%
Two-way	-	0.6%	4.2%	28.5%	66.8%
cooperation and					
interaction					

Table 2: Adult educators' views on a desired mentoring relationship

Transfer of	1.2%	5.0%	19.0%	27.3%	47.5%
knowledge					
Hierarchical	13.4%	21.1%	32.9%	17.2%	15.4%
Mentoring					
Equal Partners	2.1%	7.1%	23.4%	31.2%	36.2%

Finally, participants were asked to rate on a 5-point Likert scale the time frame or duration they would be prepared to participate in the mentoring process based on four given options. As can be seen in Table 10, the timeframe which adult educators rated the highest with an aggregate of 73.5% (41.5% definitely and 32.0% very probably) was that of lifelong mentoring, with another 17.2% saying they possibly favour this option. The next two options were participating in mentoring outside of teaching hours in the form of seminars with an aggregate of 64.7% (30.9% and 33.8%, respectively; plus 25.5% possibly), followed by the first period of starting work as a teacher at an aggregate of 57.9% (30.9% and 27.0%, respectively; plus 24% possibly). The choice for these two frameworks (outside of teaching hours and in the first period of starting work as a teacher) reflect adult educators' experiences of standard training practices from which they have formed established perceptions. Finally, the timeframe during teaching hours was rated by just under half of the participants, at an aggregate of 49.2% (23.7% and 25.5%, respectively; plus 24.9% possibly). Whereas over a quarter of the participants, at an aggregate of 25.8% (15.1% and 10.7%, respectively) stated they probably would not and definitely would not participate in mentoring during working, i.e., teaching hours. This finding, with its relatively low rating could indicate adult educators' willingness to devote personal time, rather than worktime, to something they find very useful.

Time frame	Definitely not	Probably not	Probably	Very Probably	Definitely
Any time during	10.7%	15.1%	24.9%	25.5%	23.7%
teaching					
Outside teaching	3.3%	6.5%	25.5%	33.8%	30.9%
hours in seminars					
In the first period	6.8%	11.3%	24.0%	27.0%	30.9%
of starting work					
as a teacher					
Lifelong learning	2.7%	6.5%	17.2%	32.0%	41.5%

#### 4. The GR-IDEA Mentoring Model

The mentoring model described below is derived from the key conclusions of the research findings of an empirical study conducted on Greek adult educators' views about mentoring. According to the findings, adult educators want formal and well-organized, but flexible mentoring, in a collaborative environment, with reflective processes. The developed model is established on the principles of adult education and its theoretical foundation is constructivism, which regards learning as an active process, integrating reflection on past and current knowledge in order to produce new ideas and concepts (Cox, 2006). The learning path to knowledge acquisition is characterized by relationships built on cooperation and equality. In the proposed model, mentoring is based on a Group Reflective learning process whose principal components are: Inspiration, Development, Empowerment and Action. As can be discerned, the name given to the model is an acronym of these key words.

The model's framework was developed on Kolb's experiential learning cycle (2015), making use of the individual's tendency for self-determination, self-guidance, and self-management of learning as emphasized by Knowles' theory of andragogy (1980), as well as the individual's potential for critical reflective practice as supported by Mezirow's transformative learning theory (2000). Stepping on Jarvis' (2005) critique of the knowledge-focused Kolb's learning cycle, the proposed model has two focal points. The first concerns the group and its members as individuals, giving the mentoring process a humanistic dimension (Jarvis, 2005). The second focuses on critical reflective learning (Rogers, 1996; Boud, et al., 2002). The model adopts the assertion that participants in a mentoring process go through various stages with different developmental skills at each stage, learn from their experiences, examine and challenge assumptions and behaviors, and through self-reflection end up making

commitments (Taylor, 2000). Mentoring, thus, becomes a continuous process and not merely a destination point. Research data have shown that constructivism, which is the model's foundation, supports a mentoring style that is more developmental (Furlong & Maynard, 1995; Richter, Kunter, Lodtke, Klusmann, Anders & Baumert, 2013). Also, unlike the other models of mentoring discussed in the literature, which present a linear structure, the proposed model is based on a cyclical sequence structure comprised of four stages, which make it innovative in representing the viewpoint of mentoring as a continuous process, highlighting its lifelong education characteristics, and promoting a framework for transformational development.

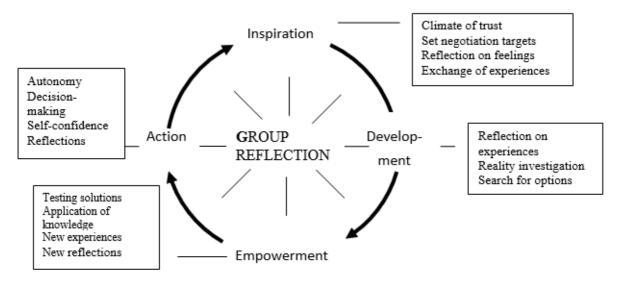


Figure 1: The GR-IDEA Mentoring Model

The dimensions Group Reflection are the two pillars of the model, while its components are Inspiration, Development, Empowerment and Action which simultaneously comprise the developmental stages of the mentoring process.

The Group dimension of the GR-IDEA model places great emphasis on the importance of social interaction in the learning process, as highlighted in constructivist theory (Vygotsky, 1978). It expresses the views of Kram (2004) and Limbert (1995) according to which individuals learn best through relationships with their peers, moving away from traditional one-to-one mentoring which supports an individualistic approach. The group dimension of the proposed model refers either to mentoring between educators who have more or less the same experience and can simultaneously be mentors and mentees (peer mentoring, or to one mentor with knowledge and experience in adult education and a group of mentee teachers (mentoring circles). It can also be in the form of a pyramid, i.e., it comprises a group of young mentee teachers at the base of the pyramid who are guided by a smaller group of experienced teachers in the middle of the pyramid and a few more specialized and experienced teachers supervising at the top of the pyramid (Ramani, Gruppen & Kachur, 2006).

The particular form of group mentoring depends on the educational organization where it is implemented, but in every case, it is collaborative and is characterized by equality in the relationships. It has the flexibility for teams to be formed on the initiative and responsibility of the participants, characterizing it as self-managed mentoring. This aspect of mentoring is clearly associated with self-directed learning (Cunningham, 2017). It adheres to the fundamental principle of adult education for self-regulation, as well as supporting the freedom of learners to define their learning sources and objectives, granting them the ability to construct their own learning experiences (Knowles, 1998). On a practical level, a group is considered functional when its size ranges between 6 and 8 people (Darwin & Palmer, 2009).

The dimension of Reflection is prevalent at every stage of the GR-IDEA mentoring model. Mentees are encouraged to approach teaching practice with a reflective attitude. Through reflective practices, they are called

on to challenge established perceptions, beliefs, and the mental habits on which they operate, which may be unfounded, stereotyped, and problematic, hindering them from understanding reality. Mentees themselves explore their actions, critically reflect, and actively participate in the process of their personal learning. Critical reflection is a key attribute of adult learners (Mezirow, 2000; Jarvis, 2005; Illeris, 2007; Freire, 1970) and develops during action (reflection in action), after action (reflection on action), for action (reflection for action) (Bell & Mladenovic, 2013). In the proposed model it is sought in all the stages of the mentoring process: from descriptive depictions of the mentees' experiences to the more critical perspective of challenging beliefs and assumptions (Brookfield, 1995). Reflective practices enhance the learner's sense of self-efficacy as a thinking professional (Tonna, Bejrkholt & Holland, 2017) and lead to liberating learning (Mezirow, 2000; Galbraith, 2003). A reflective practice occurs when each individual compares their views with those of the mentor and the other group members, when they focus on specific experiences and respond to them through a cyclical process (Kolb, 2015). The ways reflection can be enhanced include: feedback (Tonna, et al., 2017), exploratory questions that allow mentees to deconstruct and reconstruct their teaching practices (Bjerkholt, Ødegård, Søndenå & Hjardemaal, 2014), personal profession narrative and story exploration (Bolton, 2001), keeping a reflective journal (Thorpe, 2010), commentaries on videotaped teachings, (Harrison & Lee, 2011), and discussions (Deglau, Ward, O'Sullivan & Bush, 2006). In essence, reflection is the product of a group process and as a social activity can be considered an indispensable extension of cooperation in the group. It is in fact, co-reflection which touches a collective zone of impending development (Vygotsky, 1978) and creates prospects for the development of new patterns of thinking (Senge, 1990).

Group processes and reflective practices are of particular value as they provide the framework within which four flexible stages are developed, each of which has specific developmental goals. These involve the development of different competencies that depict situations equivalent to the four stages of Kolb's learning cycle (Cox, 2006). The stages of the GR-IDEA mentoring model are as though on a roundabout, each one driving the other. Obviously, these stages are not of equal duration, intensity or form for all people. They differ depending on each individual's personality, experiences, assumptions, as well as the internal and external obstacles to their learning. Firstly, the stage of Inspiration is important for the establishment of the mentoring relationship and the development of the learning process. According to Illeris (2007), it is one of the three dimensions of learning, the other two being content (learning object), and environment (social context), which need to interact organically in order for integrated learning to occur. Inspiration concerns the emotional involvement of participants in the learning process (Illeris, 2007). It is activated by building a positive supportive climate, developing relationships of mutual trust and cooperation, and creating intrinsic incentives for participants (Knowles, 1998). In other words, it is a kind of "pre-educational inspiration" which is an important condition for transition to the next stages. It primarily involves the setting of targets as a way of motivating the adult learner (Knowles, 1998), as well as a learning contract of cooperation which comprises an important self-directed learning strategy (Brookfield, 1995). Individuals share experiences, thoughts and feelings and are encouraged to interact. All actions taken at this stage are in response to the need for adults to realize their full potential (Knowles, 1998; Kolb, 1984), by focusing on the strengths of each individual. Placing the emphasis on feelings rather than on a systematic approach to dealing with problems is a key feature, which is related to the first stage in Kolb's learning cycle (1984). Reflecting on one's feelings is, although the most difficult, the most critical step for two reasons: firstly, it creates a secure, collaborative climate of trust in which issues of concern to the group are identified, and mentoring needs (consciously explicit, implicit, and latent) are explored (Knowles, 1998); and secondly, the mentees enter a "field of reconciliation" with their feelings by reflecting on them. In addition, they develop empathy, recognize dysfunctional patterns, re-examine beliefs, attitudes, assumptions, and set goals (Cox, 2006). The mentor as an inspirational coach creates an environment of acceptance, where no one role dominates, and motivates the members of the group to acquire empathy for each other's needs. Furthermore, the mentor generates conditions that encourage, motivate and support the mentee to start a dialogue with emphasis on their teaching work. At this stage, the mentor is a "source of inspiration" (Ross, 1995) and participates as a group member rather than being the possessor of knowledge (Freire, 1970). Basic principles of the first stage are equality, respect, acceptance, cooperation, freedom of expression, and team spirit. The exchange of experiences and the setting of goals are equivalent to the stage of concrete experience in Kolb's cycle of experiential learning.

In the second stage, that of Development, individuals look for functional patterns of interaction in the group and develop skills related to critical reflection. They reflect on their experiences, identify and critically review their own cognitive models that influence their teaching behavior. They look for new options and solutions to teaching issues that concern them. For the heuristic path to knowledge, methods are chosen that promote interaction, the connection of learning with real problems, and the exchange of experiences (Knowles, 1998). Exploring reality at this stage is equivalent to the stage of reflective observation in Kolb's cycle of experiential learning.

The third stage, Empowerment, includes the emotional, social and cognitive empowerment of the participants (Lee & Nie, 2014). In fact, it involves having critical awareness of the situation and refers to the ability to make decisions for action. In this sense it is associated with self-directed learning and the empowerment of synergistic interaction (Vogt & Murell, 1990). It is related to the autonomy of individuals to create thought, make decisions and construct knowledge, as well as to their ability to communicate more effectively and adopt changes in relation to the object of their employment (Kappelman & Richards, 1996; Short, 1992). At this stage, the self-confidence of individuals who can deal with internal conflicts by controlling their behavior and feel more secure about their teaching choices is enhanced. They use knowledge to strengthen their weaknesses and capitalize on their strengths (Cox, 2006). Through teamwork they utilize their reflective skills and are encouraged to try new perspectives by taking control of their learning. According to Rogers (1996), the only learning that influences behavior is when a person becomes the agent of knowledge discovery, acquisition and appropriation. "Choices" made at this stage are equivalent to the stage of abstract conceptualization in Kolb's cycle of experiential learning.

In the fourth stage, that of Action, the participants try out solutions and implement suggestions that were discussed in the group. In essence, this concerns action learning in which knowledge is directly applied and the mentee becomes the researcher of their own actions (Schon, 1999). The acquired knowledge is tested by creating new experiences which activate new reflections. In this learning process, reflection and action are in a dialectical relationship, where meaning is extracted from experience and is reflected on (Kolb, 1984). As a result of reflecting on the experience, mentees critically examine their perceptions which constitute the interpretive framework of their personal experiences, and in so doing activate a process of transformation (Mezirow, 2000). The skills associated with this stage are readiness for action – making any necessary adaptations and improvements - and the willingness to critically reflect on the action. Critical thinking is not related to the "how" but to the "why" of an action, which results in either understanding the action or modifying it. In terms of application, the actions that can be taken at this stage include co-teaching of a subject, participatory observation and feedback, and group planning of teaching units. This stage in the GR-IDEA mentoring model is equivalent to the stage of active experimentation in Kolb's cycle of experiential learning.

The reflective processes that take place in the fourth stage of the cycle activate internal psychological processes which in turn instigate a return to the first stage, thus creating a process of continuous reconstruction of the experience. In this way, a continuous circular course of mutual exchange and continual reflection is generated. Feedback from the group is in a dialectical two-way relationship with reflection: reflection is strengthened by feedback and feedback is enhanced by reflection.

In sum, the GR-IDEA mentoring model can be implemented in small groups of mentees who teach the same subject, which form the communication framework, meeting at regular intervals and sharing ideas and experiences. The number, frequency, content and duration of the meetings are decided by the group members and determined by their needs. Findings in the international literature support compatibility of the mentor and mentee based on their teaching the same subject (Koballa & Bradbury, 2009). The communication framework of each group can be expanded by creating open discussion spaces in which adult educators of various specialties and subjects participate, and in which each group communicates its concerns with the other groups, jointly seeking solutions on adult teaching issues. Vocational learning practices are applied at each stage (Cosner & Jones, 2016) such as: case studies, experiential exercises, observing others teach, self-assessment, etc. All the practices are collaborative and promote reflection. The GR-IDEA mentoring model has the flexibility to adapt to the particular conditions and contexts of the educational organization in which it will be implemented.

#### 5. The e-GR-IDEA Mentoring Model

The proposed GR-IDEA mentoring model can also be converted into an educational application able to be used in a digital environment, which will be able to be implemented either in conjunction with face-to-face mentoring practices or independently, depending on the circumstances. Its parallel use essentially extends mentoring by combining the group process in physical encounters and reflective practices via the internet (Redmond, 2015). Its autonomous use removes space-time constraints, and can be applied in cases where mentoring practices are not used in person. It can be adopted by adult educators, mentors, and educational organizations. The name of the application is e-GR-IDEA, and will be available through Android and IOS operating systems on personal computer, tablets and smart phone. The application can be extended to all educational organizations wishing to promote tele-mentoring practices. Users of the application can be current adult educators, their mentors, as well as directors of educational organizations by registering and obtaining a username and password. The application incorporates the logic of peer-to-peer teaching, which serves the basic forms of interaction within the context of the educational process in an online environment (Moore, 1989; Su& Beaumont, 2010). The online team can be set up to interact at various combination levels, such as: adult educator-mentees with mentors; educators with each other; mentors with each other; educators and mentors with directors of educational organizations. Mentoring that is developed electronically through the e-GR-IDEA application does not differ qualitatively from the in-person model, as it involves collaborative and reflective practices, and in addition offers flexibility, facilitates accessibility, diminishing time and space barriers (Bierema, 2002; Branch, 2016). The enhancement of participants' initiative and responsibility encompasses elements of self-directed learning (Cunningham, 2017) which is completely consistent with the adult education principle of self-regulation and learners' freedom to define their sources of learning (Knowles, 1998).

In order to design the digital application for e-GR-IDEA, reference was made to the relevant literature (Rowland, 2012; Branch, 2016; Neely, Cotton & Neely, 2017; Brailas, Avani, Gini, Deilogkou & Dimitriadis, 2020), whose content structure was based on adult education appropriate teaching methodology. The application's main educational goal is the exchange of experiences and feedback on teaching issues through online group-collaborative and reflective practices (Fragkaki & Lionarakis, 2011). A brief explanation of the application at a technical level follows. The application's initial template is dispayed in Figure 2; users click on this. Then by clicking on an option listed on the Menu, users enter that space (Figure 3). It should be noted that on this webpage, there is also the possibility for stakeholders to enter a forum, which acts as a virtual discussion space



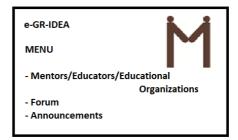
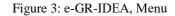


Figure 2: e-GR-IDEA, Entry to the application



Then, according to their user status, i.e., mentor/educator/educational organization, they follow the successive routes which correspond to the different types of interactions they want to achieve (Moore, 1989). All three user types interact with the same content. As an example, Figure 4 shows the list of options available once the interaction 'Educational Techniques' has been selected, each of which provides support material, available in real time. Taking 'Groupwork' as an example, (Figure 5), it can be seen that there are subsections providing useful details on this technique, such as the factors that endorse its effective use (benefits), points that require particular attention (difficulties), examples by specialty (subject), as well as relevant literature sources, research and publications on the subject (references), which are to be updated at regular intervals. In this space there is also "Add other," which is for users to contribute another option they may wish to. As is widely accepted, teaching material constitute an aspect of communication, thus sharing it instigates attitudes of reciprocity and

interdisciplinary cooperation. In this way, they set their own learning goals and construct their own learning experiences (Knowles, 1998).

e-GR-IDE	4	M		
MENTORS				
Educational Techniques				
<ul> <li>project</li> <li>role playing</li> <li>case study</li> <li>questions</li> <li>debate</li> </ul>	- discussion	- groupwork - brainstorming * Add other		

Figure 4: e-GR-IDEA, Educational Techniques



Figure 5: e-GR-IDEA, Example of 'Group Work' option

One other option in the application, mentioned previously, is that of 'Forum' (Figure 6), comprising open asynchronous topic discussions, whose function is to provide users with a means of two-way communication and interaction between adult educator and mentor, or educators with one another (Moore, 1989). Users are given the opportunity to share experiences, views, thoughts and personal evaluations, alternating between mentor and mentee roles. Thus, the aim is for there to be a creative, fruitful, and productive exchange of views, as well as constructive bidirectional feedback on the various issues concerning adult education and teaching. Indicatively, topics which can be developed include: innovations and good practices in adult education; suggestions for lesson plans for various subjects; views and reviews on research and publications; as well as dialogue on problems faced by adult educators in the application of various educational techniques and how these can be managed. In essence, it is the virtual space where reflective practices take place. Users share their experiences, reflect critically, post their personal reflections, explore and experiment with new ideas, as well as confer before, during and after an activity (Bell & Mladenovic, 2013). After all, each individual reflection is fueled by other people's reflections, which, in turn, produces a new reflection, leading to a new action.

Regarding the 'Announcements' option (Figure 7), taking educational organizations, as an example, they can go into the relevant compartment and promote their activities, such as workshops, face-to-face and online training, seminars, etc.), or report whatever they consider can promote and upgrade the quality of the educational work provided, as well as the development of cooperation between educators and educational organizations.

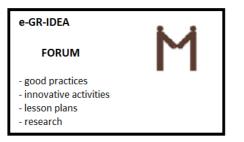


Figure 6: e-GR-IDEA, Forum

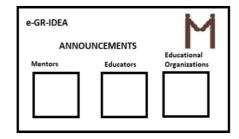


Figure 7:e-GR-IDEA, Announcements

The e-GR-IDEA application broadens the number of adult educators who can benefit from mentoring practices as it is not limited to those belonging to an educational organization. It enables for the creation of an online network of educators and directors, who alternate between the roles of mentor and mentee, and it induces the establishment of an internet community with a participatory culture of action and synergy based on elements of autonomous and transformative learning (Fragkaki & Lionarakis, 2011). In relation to the original GR-IDEA Mentoring Model, its electronic counterpart mainly reinforces skills in the stages of Development, Empowerment, and Action.

#### 6. Discussion

Whether face-to-face or online, the GR-IDEA (and e-GR-IDEA, respectively) Model of Mentoring applies theoretical knowledge for adult learning and serves the principles of adult education. Moreover, it provides a space where active inclusive education, as well as personal and professional development can take place. By promoting self-regulation and the freedom for adult educators to define both their learning resources and learning objectives, it empowers them to construct their own learning experiences. As supportive practice, it can be adapted to the specific circumstances of all educational organizations which want to adopt innovative actions in order to consolidate the educational endeavors and teaching practices of its educators. Finally, of particular interest for further research is the examination of the most opportune conditions for the implementation of the GR-IDEA Mentoring Model in adult education environments, the study of which will not only facilitate equality in the mentorship relationship but just as importantly will also develop a cognitive basis for a positive transformation of adult educations.

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