Certified Adult Educators’ Attitudes towards Continuing Education

Valkanos, Efthymios
Lecturer, University of Macedonia
156, Egnatias Street, PO Box 1591, 540 06, Thessaloniki, Greece
Tel: 30-23108-91385   E-mail: evalkan@uom.gr

Giossi Stella
PhD Candidate, University of Macedonia
156, Egnatias Street, PO Box 1591, 540 06, Thessaloniki, Greece
Tel: 30-23103-46839   E-mail: sgiosi@uom.gr

Anastasiadou Sofia
Assistant Professor, University of Western Macedonia
2, Eleftheriou Venizelou Street, PO Box 1591, 501 00, Kozani, Greece
Tel: 30-23104-16056   E-mail: sanastasiadou@uowm.gr

Abstract
It is evident nowadays that continuing education has emerged as a necessity to educators of every kind and especially to those who educate adults. Educators have recognised the importance of continuing education and they actively motivate and teach their students how to be engaged in continuing education programs. But are they themselves really interested in being involved in continuing education programs? In order to answer this question, we have decided to investigate attitudes of certified adult educators toward continuing education. The purpose of this study is to identify attitudes of the 220 certified educators of Vocational Training Centres (K.E.K.) in the prefecture of Thessaloniki and to identify their approaches to different learning styles, as well as to assess their general interest in continuing education. More specifically, in the present research confirmatory factor analysis was applied aiming mainly at the construction of a model that estimates educators’ opinions in regard to continuing education and its elements. The structural model that resulted from the analysis of data confirms the existence of five factors relative to the values of the following: continuing education, certification of adult educators, use of different teaching methods, learner’s personal satisfaction and finally, participation in adult education programs.

Keywords: Continuing education, Adult educator, Attitudes, Professional development

1. Introduction
With the orientation of knowledge-based society, the majority of European countries participate in particular programs supported and financed by National and European funds. Among them are programs relating to vocational training, continuing education and training, life long learning, and human resources development. In recent years, Greece as a European member state could not be absent from the new developments on adult education and thus, Greece is involved in many specialized programs including those dealing with educators’ education and training.

According to Hughes (2005), all professionals find it necessary and often mandatory to participate in continuing professional education. Professionals seek to enroll in programs that go beyond their original degree status in order to preserve current knowledge and skill, maintain current certification and gain advanced knowledge and skill to grow professionally (Hughes, 2005: 1).
That underlines the importance of educators to be continuous learners themselves in order to be professionally effective. (Caudron, 2001, cited in Gauld & Miller, 2004).

Greece appreciates the rising demand for continuing education and puts an emphasis on Continuing Training, and for this reason the National Accreditation Centre for Continuing Vocational Training (EKEPIS) was established in 1997. Its function is under the Law 2469/1997 (O.G. 38A/14-03-1997) and the Presidential Decree No 67 (O.G. 61A/ 21-4-1997). EKEPIS is a statutory body supervised by the Minister of Employment and Social Protection with people of high expertise in a wide range of fields and it maintains a Register of Evaluators, who serve as external-expert collaborators in the EKEPIS projects. Its mission is to develop and implement the National Accreditation System for Continuing Vocational Training. This system targets the following:

- ensuring quality assurance in vocational training
- improving the effectiveness of training services
- reinforcing reliability in vocational training
- linking vocational training with employment and the demands of the labour market
- interlinking the systems of VET (linking initial with continuing vocational training systems)
- promoting lifelong learning.

In Greece, there are two organizations that offer programs of initial education, continuing education and training and lifelong learning: the Greek Organization of Manpower (OAED), and its subsidiary company “Vocational Training S.A.” The second organization has the responsibility of managing the funds and the functions of 28 Institutes of Vocational Training (IEK), Vocational Training Centers (K.E.K.) and Centers for Confronting Social Exclusion (K.E.K.), as well as Vocational Training Schools for special needs (Giossi & Valkanos, 2007: 57-58).

2. Purpose of the study

The aim of this study is to identify the attitudes towards continuing education of Greek certified educators. They educate adults under the obligation to be registered by EKEPIS in order to assess their ability to teach. Educators of Vocational Training Centers (K.E.K.) in the prefecture of Thessaloniki are chosen as a representative group of those registered by EKEPIS, on the basis of their qualifications and experience.

An effort is made to identify the educators’ attitudes, their approach to different learning styles and their general interest in continuing education.

The driving force was the emphasis which was put on lifelong learning by the Commission in their programmes of 2008 and 2007-2013, and the mobility of the Greek government to invest in and finance similar programmes. Besides that, the low percentage of Greek participation in programmes supporting continuous vocational training and education highlights the necessity of changing the current situation.

Moreover, lifelong learning and education were among the essential priorities of the Commission for 2008, in the context of the prosperity objective and the Lisbon strategy. Also, lifelong learning is essential to the Education and Training 2010 programme, for which special data is needed.

However, there have been very few studies which have attempted to quantify educators or educators’ attitudes towards adult and continuing education.

3. Attitudes, professional development and performance

Attitudes toward continuing professional education must be examined in order to have an idea of how professionals of K.E.K. perceive and interpret the importance of continuing professional education. Besides that, it is significant to know what motivates them to participate in continuing education activities. For example, they can be motivated by concrete orientation such as the goal, the activity, and the security in the profession, the status advancement or even the learning itself.

Attitudes are often related to the learner’s preferences in learning. According to Reichmann and Grasha (1974 cited in Sadler-Smith, 1996: 30), the three learning preferences are: dependent learner, collaborative learner and independent learner. The first type has no autonomy and prefers highly structured programmes and likes to depend on teacher’s directions and assessment. The collaborative learner prefers teamwork and interactive learning, wherein discussion is his most suitable method of learning. The last type of learner is the one who respects the teacher as a source of knowledge and takes an active part in the learning process.
Also, attitudes toward continuing professional education are strongly connected to training and teaching processes as well as to professional development and its programs. As training is a planned learning experience with the purpose of bringing about permanent change in an individual's knowledge, skills, or attitudes, it can not be seen separately from attitudes and professional development.

Also, the level of a teacher’s or educator’s professional development is prescribed by the dimensions of teaching. According to Munoz et al. (2000 cited in Krishnaveni & Anitha, 2007: 151), the key aspects of teaching in terms of characteristics of the ideal teacher, are the following:

(1) Teacher competency;
(2) Teaching qualities;
(3) Teacher’s appearance; and
(4) Teacher directiveness.

In addition to that, adults “participate” in the professional development process when they are engaged in substantive actions, either individually or together, that require complex thinking to construct new skills or deeper meaning. Most participation requires adult reflection, strong motivation and practice. No matter what the prior knowledge or skills an adult has, paying attention and being involved are critical for his/her new learning experience during professional development. (Wlodkowski, 2003).

Motivation, a specific desire on the part of the trainee to learn, is related to learning and to the content and completion of a training program. Skills assessment, expectations, and career and job attitudes all have a direct impact on motivation to learn, too. Trainee’s motivation to learn is also related to motivation to apply newly acquired skills in the work setting and to the effectiveness of the training process.

Motivation is a starting point of a professional development program in which personal relevance is a key ingredient in developing a positive attitude. Participants are extremely sensitive to the degree to which they can identify their perspectives, needs, and values in the content and processes of the program. The program is relevant when learning reflects the personal, communal, and cultural meanings of the learners in a manner that shows a respectful awareness of their perspective. (Wlodkowski, 2003:43).

Educator’s participation in professional development programs represents his/her positive attitude toward continuing education and mainly his/her tendency to improve performance. Performance and attitude to improvement is well demonstrated by the “Performance analysis grid” (based on Glaser’s Performance Analysis Grid, 2002:4), shown in figure 1.

Insert Figure 1 Here

Horizontal axis and vertical axis show how well someone is doing his/her job (effectiveness) and how keen he/she is to improve (enthusiasm to improve).

Quarter A: Motivation (is necessary for someone who is doing his/her job well but doesn’t want to improve)

Quarter B: Resources (is related to someone who is doing his/her job well and wants to improve and probably doesn’t need training so much as resources, such as time, to enable him/her to develop).

Quarter C: New job (is related to someone who is not doing his/her job well and doesn’t want to improve and probably needs a new job, either in the same institution or somewhere else).

Quarter D: Training (is necessary for someone who is not doing his/her job well and who does want to improve). This “performance and attitude to improvement” grid is an important tool for helping educators to enhance their participation in continuing education programs in order to improve their performance and increase their enthusiasm for professional development. In order for program outcomes to be successful, an emphasis should be put on the quality of training offered. Therefore, program designers should bear in mind how adults learn and what their characteristics as students are. For example, they tend to learn subjects relevant to their daily routine or useful to their work improvement. As students, they prefer self-directed learning, they want a convenient and relaxing atmosphere in order to participate in the learning process, and they want to know the benefit of their participation in advance. Apart from that, what influences the success of the training program is the role of the adult educator.
4. The role of the adult educator

The educator’s attitude toward continuing professional education influences both his/her role and status. The role of the adult educator in the workplace is to structure the learning experiences and activities that are encountered by the trainee such that optimal understanding and acquisition of information takes place.

Therefore, it is useful for an educator to (Cornford & Athanasou, 1995: 14-15):

• maintain good interpersonal relationships with trainees;
• communicate clearly and provide constructive feedback;
• demonstrate mastery of a range of teaching skills;
• reveal mastery of the theory and skills being taught;
• motivate trainees;
• have a keen understanding of the nature of individual differences and be capable of translating this understanding into different teaching techniques and levels of explanation for individual trainees;
• be aware of both the limitations and possibilities of the learner at different stages of the skill learning process.

Besides that, educators’ beliefs about learning and their attitudes toward differences in student learning have a substantial impact on student learning. At the same time, the knowledge status of the educator and the teaching practice both play crucial roles in the teaching process. This includes both implicit and explicit knowledge, the relationship and interaction of which is shown in figure 2.

Insert Figure 2 Here

Learning and teaching styles in adult education should take into account that teaching practice is affected both by educators’ (same to say teachers’) explicit theoretical knowledge as well as their implicit knowledge on learning and teaching (Figure 2). This means that, in addition to providing educators with explicit theoretical knowledge on learning and teaching styles, a process of transforming educators’ implicit learning and teaching styles towards being explicit should be effective to their performance. Such insight and understanding of their own preferences for learning and teaching will enable the educators to consciously choose pedagogical strategies of matching and/or mismatching student learning styles and work with differentiation of teaching practice according to the students’ styles (Nielsen, 2008: 156-157).

Educators are expected to be aware of recent educational developments and be involved in related initiatives. Contract renewal in order to teach at the same KEK the next year is based firstly on the evaluation of each program trainee and secondly on their performance records. This highlights the importance of performance and how it is connected with their professional development. Therefore, it is evident that it is necessary for the educators, either to start or to continue their cooperation with a particular KEK, to continuously update their knowledge and teaching practices. Besides that, educators should have in mind that they have to develop their performance and align it with the trainees’ needs and KEK’s developing plans (Black, et al, 1994:28-29).

5. Methodology

5.1 The research instrument

A 23-item questionnaire was designed to study the attitudes of K.E.K. educators towards continuing education and allow them to self-evaluate their reliance on continuing education and life long learning. It was based on the Adults Attitudes towards Continuing Education Scale (AATCES) instrument used by Hughes, (2005) and was adapted after a draft questionnaire piloted with 28 K.E.K. educators. The pilot sample and study gave us useful information for improving the questionnaire.

Ratings on each item were obtained on a 5-point scale where 1 represents SD = Strongly Disagree and 5 represents SA = Strongly Agree. This scale aimed to identify K.E.K. educators’ perceptions on continuing education, and the extent to which they agree or not to participate in continuing education programs. Educators were asked to choose a number from 1 to 5 in order to express their opinions on the items most relevant to the extent to which they thought continuing education is necessary. They were also asked to self-evaluate their own attitudes toward learning, teaching methods and their professional certification.

The questionnaire is divided into five sections. The first section refers to continuing education, the second one to the certification of adult educators, the third to the use of different teaching methods, the forth to learner’s personal satisfaction and the fifth to participation in adult education programs.
5.2 Sample

A request to participate in this study was emailed to 560 K.E.K. educators of the Prefecture of Thessaloniki who are certified by the EKEPIS Committee. Responses were received by 220 certified K.E.K. educators, who were asked to answer the survey questionnaire in the academic year 2008-09. Demographic data such as age, gender, and general educational level, besides their expertise and organization position, was also sought.

This sample size is quite satisfactory as it represents the decuple number of questions of the concrete questionnaire. Besides that, the sample covers a satisfactory portion of the total population of certified K.E.K. educators of the Thessaloniki Prefecture in Greece (Cohen et al, 2007).

The 220 participants (including those with part time or full time employment, according to the financial support of the European Commission) were K.E.K. educators with different areas of expertise and enrolled in adult education programs with a variety of relevant issues. The sample consisted of 122 males (percentage 61%) and 78 females (percentage 39%). The largest percentage, 51.5% (103) of the 200 respondents, is in the age group of 45-54, while the least 4.5% (9) represent the age group of 65 and over. 28% (52) are between the ages of 25 and 34, and 18% (36) are between the ages of 55 and 64. Referring to their marital status, 29% (58) are single persons, 13% (26) are married without children, 53.5% (107) are married with children, 4% (8) are divorced and 0.5% (1) is widower/widow. From the 220 respondents, 1.5% (3) have a high school diploma, 20% (40) are graduates from Technological Educational Institution (T.E.I.), 29% (59) are university graduates, 37% (74) have a master’s degree and 12.5% (25) have a doctorate.

As far as their job position within the K.E.K. organization, 91.5% (183) are educators, 5% (10) are directors and 3.5% (7) are principals of the organization to which they belong.

Concerning the area of the adult educators’ specializations, of the 220 participants 29.5% (59) are those who are Electrical, Mechanical and Computer Engineers, while 14.5% (29) are Elementary, Secondary Education Schoolteachers, and University Professors. 9.5% (19). Educators’ specializations are represented as follows: 9.5% (19) in Economics, 8% (16) are specialized in Agricultural Science, 5.5% (11) are specialized in Chemistry, Chemical Engineering or Food Technology, whereas 5% (10) are specialized in Mechanical Engineering. Those specialized in Civil Engineering and Psychology-Sociology represent the same percentages, that is to say 4.5% (9). Also, the same percentages are shared by those who have the specializations Historian, Philologist, Archaeologist and Medical Physician-Physiotherapist-Nurse, that is to say 4% (8) and the specializations Designer and Librarian represent 2.5% (5) each. Finally, those who are Lawyers, Journalists and Communication specialists represent 1.5% (3), while the Artists, Agronomists and Topographers represent the smallest percentages, that is to say 1% (2). With regard to their subject of teaching, it is characterized by a strong affinity with their area of specialization. Proportionally with the area of specialization- the subject of teaching Information Technology and Computer Science has the largest percentage at 31.5% (63) and then follows the subject of Finance-Quality Management Systems at 13.5% (27), General Educational Services at 13% (26) and the subjects of Rural-Environmental Sciences at 9.5% (19). Library Science, History, Archeology, Literature and the Medical-Paramedical Science subjects represent 4% (8) each. Then follow the Chemistry, Food and the Mechanical Science Subjects with 3.5% (7) each, then at 3% (6) the Technical Project Work, at 2.5% (5) Library Science, at 2% (4) Planning. Law and Communication Sciences at 1.5% (3) each. Finally, the subjects of Consulting, Artistic Services and Topography each represent 1% (2).

6. Results

The study was conducted from September 2008 to June 2009. During this period of time, 220 valid questionnaires were collected. The size of the sample is quite satisfactory as it is ten times the sum of the questions of the questionnaire. The indicator of appropriateness of sample [KMO]=0.755>0.60 showed that the data gathered in the sample was suitable for factorial analysis and the control of orbicularity (Bartlett's sign <0.01) showed that the analysis in components make sense. With this analysis, the data were grouped on the basis of each other cross-correlated with the aim of imprinting those factors that describe completely enough the educators’ attitudes towards continuing education.

Based on analysis (Table 1) results, 4 uncorrelated factors explain the 51.740% total inactivity of data and those are described separately afterwards. The factor of internal consequence (reliability) of Crobach's a is statistically significant and equal to 65.98% of the total of questions and for that reason the scale of 23 questions was considered reliable with the significance of internal consequence. The factor of reliability (Crobach's a) is statistically significant and equal to 71.12%, 73.46%, 64.03%, 59.67% and 51.43%, for the 1st, 2nd, 3rd, 4th, 5th factorial axis respectively. Finally, from the prices of common factor variance (Communality) for each question,
we realise that most have a value greater than 0.50, a fact that declares a satisfactory quality of measurements from the sample-model of 5 factors-components.

More specifically, on the basis of educators’ attitudes, as it resulted from the factorial analysis, in the first axis-factor F1 that it explains, afterwards, the rotation varimax, 13.216% of the total dispersion belong mainly the questions q15, q16, q14, q9, q13. The first factor describes the opinions of adult educators of K.E.K. regarding how continuing education helps adults to understand the developments and also supports them as professionally successful adults. Moreover, the participants in this research consider that more and more adults should always be encouraged to participate in programs of continuing education where the teaching methods play a crucial role in the learning process. Finally, the opinion is often expressed that the optimum way of learning for the adult is his/her participation in programs of continuing education, rather than following any other informal method of learning. This factor highlights the value of continuing education. The reliability of factor is a=0.7112 and is particularly satisfactory.

Insert Table 1 Here

In second factor F2 that explains the 12.155% of total dispersion belong the questions q19, q22, q20, q23, q21, and q8. In factor F2, the attitudes of adult educators of K.E.K. on the educators’ role are presented. More specifically, they highlight the perception that on one hand the certified knowledge increases the prestige of and the respect for the educator and on the other hand the benefit of qualitative education requires certified adult educators. Therefore, each modern adult educator believes that the certification is essential, because only the certified educators are the first priority in the personnel selection procedure within important educational organizations. In addition to that, educators declare that they do not believe that the certification is a prerequisite for their job recruitment. Also, they strongly express their perception that the trainees can not influence the selection of teaching methods. This factor expresses the value of certification of adult educators. The reliability of this factor is a=0.7346 and it is also very significant.

In the third factor F3 that explains the 9.565% of total dispersion belong the questions q5, q7, q17, q6. The third factor is composed of the points of view of the participants in regard to their ability to take into consideration the individual learning styles of each trainee. Their statements show that these educators are of the opinion that the use of different teaching methods helps the trainees to absorb knowledge in a better way. That is why the use of contemporary teaching methods such as experiential learning, role playing, case studies, simulation and games are necessary to the successful educator. It is worth mentioning that they strongly express the conviction that continuing education is not for adults who have nothing to do in their spare time. This factor expresses the value of the use of different teaching methods. The reliability of the third factor is a=0.64.03 and is significant.

The fourth factor F4 that explains the 9.363% of total dispersion of data is constructed and interpreted by the questions q12, q11, q18, q10. This factor refers to the satisfaction that continuing education offers to them, recognizing it as a constructive use of free time and a great support to those who wish to improve the productivity and satisfaction in their lives. For all these reasons and according to adult educators’ opinions, continuing education is necessary for all adults. This factor expresses the learner’s personal satisfaction. The reliability of the fourth factor is a=0.5967 and is marginally significant.

The fifth and last factor F5 that explains the 7.441% of total dispersion of data is constructed and interpreted by the questions q4, q3, q1, q2. The fifth factor is reported in the weakness of anyone’s self-learning without participation in adult education programs. More specifically in this factor, the adult educators’ perceptions state that the return of an adult to school does not make them feel uncomfortable. On the contrary, they enjoy reading and find the learning activities particularly interesting. This factor expresses the need of attendance in adult education programs. The reliability of fifth factor is a=0.5143 and is not significant.

To sum up, certified educators recognize the value of continuing education and the necessity of getting involved in it. They understand the significance of their certification but they do not consider it a matter of getting or losing a job. The validity of the use of different teaching methods can influence teaching outcomes but this is not under the trainee’s power. Finally, they really find continuing education to be a good way of changing their life in a satisfactory way. Attendance in particular education programs is not the only choice but it can be demonstrated to be one of the most preferable.

7. Conclusion

As the training profession itself has broadened its content due to the rapid development of technology, the expansion and transformation of continuing education to lifelong learning and the requirements for continuous
Improvement of skills and competences, educators have to put emphasis on their professional development in order to effectively face their workplace challenges.

Educators should not only learn new skills but should also develop new insights into pedagogy and their own practice, and explore new or advanced ways in order to participate in lifelong learning activities, both as an educator and as a trainee whenever it is required.

Brookfield (1986, cited in Dwyer, 2004: 82-83) highlights the importance of an educator’s active role. Whether they act as instructors, presenters, developers, resource providers or trainers, they should have in mind that it is useful for the effectiveness of the learning procedure to enhance interaction between learners and educator and to play the role of facilitator by respecting learner’s experience, showing sensitivity and warmth especially to insecure learners and therefore creating a supportive learning climate for all.

Concerning the achievement of learning goals, the educators not only concentrate on whether the work is done correctly and efficiently but they also develop some other skills such as cooperation, the way they learn and how they recognise the effects of being involved in continuing professional development. In addition, in playing the role of the learner rather than of the educator, the educator becomes a team member who can then better evaluate the flow of the learning process (Harris, et al, 1998).

Moreover, educators often act as models for their trainees, so having this in mind they have to focus not only on teaching, but also on their effort of converting their learners to the lifelong learning path. As a result, both educators and trainees can enhance the quality of educational programs since they can play a crucial role in the process of lifelong learning.

Therefore, educators can no longer consider themselves simply as teachers with limited responsibilities and authority. It is true that in the last decade, the scope of an educator’s function has changed and therefore he/she has to take on new responsibilities in order to equip trainees with the relevant skills to achieve the desired results. As a result, it is necessary for the educators to be proficient not only as educators but also as consultants, mentors and knowledge managers, differentiating in this way their traditional role and opening their lifelong learning horizons.

**References**


Table 1. Principal Component Analysis

Rotated Component Matrixa

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>q15:</td>
<td>.729</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q16:</td>
<td>-.644</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q14:</td>
<td>.632</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q9:</td>
<td>.621</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q19</td>
<td>.426</td>
<td>.349</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q22:</td>
<td></td>
<td>.741</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q23:</td>
<td></td>
<td></td>
<td>.594</td>
<td></td>
<td></td>
</tr>
<tr>
<td>q21:</td>
<td></td>
<td></td>
<td></td>
<td>-.533</td>
<td></td>
</tr>
<tr>
<td>q8:</td>
<td></td>
<td></td>
<td></td>
<td>.383</td>
<td></td>
</tr>
<tr>
<td>q5:</td>
<td></td>
<td></td>
<td></td>
<td>.701</td>
<td></td>
</tr>
<tr>
<td>q7:</td>
<td></td>
<td></td>
<td></td>
<td>.683</td>
<td></td>
</tr>
<tr>
<td>q17:</td>
<td></td>
<td></td>
<td></td>
<td>-.481</td>
<td>-.622</td>
</tr>
<tr>
<td>q6:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.595</td>
</tr>
<tr>
<td>q12:</td>
<td></td>
<td></td>
<td></td>
<td>.409</td>
<td>.673</td>
</tr>
<tr>
<td>q11:</td>
<td></td>
<td></td>
<td></td>
<td>.668</td>
<td>.301</td>
</tr>
<tr>
<td>q18:</td>
<td></td>
<td></td>
<td></td>
<td>.653</td>
<td></td>
</tr>
<tr>
<td>q10:</td>
<td></td>
<td></td>
<td></td>
<td>.470</td>
<td>.542</td>
</tr>
<tr>
<td>q4:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.651</td>
</tr>
</tbody>
</table>

q15: Continuing education helps people understand the development.
q16: Successful adults do not need to participate in continuing education programs.
q14: More adults should be encouraged to participate in continuing education programs.
q9: Teaching methods play a crucial role in learning process.
q13: The best way for adults to learn is to attend continuing education programs.
q19 Certified knowledge increases the prestige and respect to the educator.
q22: Provision of qualitative education requires certified adult educators.
q20: The contemporary adult educator believes that certification is the necessary choice.
q23: Certified educator is the first priority at the personnel recruitment of important educational organizations.
q21: Certified adult educator believes that certification is forced by the educational system.
q8: Trainees can not differentiate the pre-determined teaching methods chosen by the educator.
q5: Adult educator takes into consideration the concrete way of trainee’s learning.
q7: The use of different teaching methods helps trainees in better knowledge absorption.
q17: Continuing education is mostly for people with little less to do.
q6: The use of contemporary teaching methods (like active learning, role playing, case studies, simulation, and games) is necessary to each successful adult educator.
q12: Continuing education makes me satisfied.
q11: Participating in continuing education is a good use of leisure time.
q18: Continuing education is an important way to help people cope with changes in their lives.
q10: Continuing education is necessary to all adults.
q4: I can learn everything I need to know on my own without participating in continuing education.
Table:

<table>
<thead>
<tr>
<th>Question</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>q3: Going back to school as an adult is embarrassing.</td>
<td>-.639</td>
</tr>
<tr>
<td>q1: I do not love reading.</td>
<td>-.515</td>
</tr>
<tr>
<td>q2: I find learning activities especially interesting.</td>
<td>.356 .466</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Quartimax with Kaiser Normalization.
a. Rotation converged in 16 iterations.

Figure 1. The performance and attitude to improvement (Bubb & Earley, 2007: 46)
Motivation (necessary for someone who is doing his/her job well but doesn’t want to improve)
Resources (necessary for someone who is doing his/her job well and wants to improve)
New job (necessary for someone who is not doing his/her job well and doesn’t want to improve because he/she probably needs a new job)
Training (necessary for someone who is not doing his/her job well and does want to improve)
Teaching practice covers both implicit knowledge (including learning styles, teaching styles and experiences as a learner) and explicit theoretical knowledge on human nature, learning and teaching.