

## **Developing a research tool to evaluate basic factors of Vocational Training Institute courses and educational practices**

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### **Abstract**

*This study aimed at investigating the extent to which a suggested research tool can be used to assess educational factors. For the purposes of the study a brief questionnaire was designed, piloted and stabilized before it was administered to 73 Vocational Training Institute participants. The respondents replied to the five-point Likert scale questionnaire which consisted of 32 items and five axons regarding course practices, student assessment approaches, instructor efficiency, student involvement in learning and laboratory tasks and evaluated factors such as teachers, course and student development which constituted the dependent variables of the research. The study also focused on the extent to which the independent variable gender affected the students' responses in any way. Student evaluating views are presented, and implications of this study are discussed in relation to evaluation of Vocational Training Institutes practices and stakeholders' efficiency level.*

**Keywords:** evaluation; assessment; Vocational institute; research tool; educational stakeholders.

JEL classifications: I20, I21, I29

### **Introduction**

Today, evaluation, in all aspects of life, is highly important to determine the quality of procedures and services offered. Education and educational results hold a significant place in our lives as well and therefore they also need to be evaluated for their quality. It is necessary here to clarify that "Evaluation" in education "goes beyond student achievement and language assessment to consider all aspects of teaching and learning and to look at how educational decisions can be made by the results of alternative forms of assessment" (Jabbarifar, 2009). Nevertheless, the terms assessment and evaluation too often overlap each other.

Education remains a fundamental right of every citizen and among the most basic obligations of every state. According to the Greek Constitution education is a basic goal of the Greek State which aims at the moral, spiritual, professional and physical development of the Greeks, the development of a national and religious conscience for its

people and their development into free and responsible citizens. For the above to be successful, education and consequently educational stakeholders and services must fulfill the criteria needed for their integration in the community and therefore should be assessed and/or evaluated in order to ensure their quality and effectiveness. Educational evaluation is considered therefore as a process that aims to identify, in a systematic and objective way, the result of a certain activity in relation to the objectives it addresses and the suitability of the means and methods used to achieve them (Kokkineli, 2017). Educational assessment on the other hand can be considered as the study and recording of all the factors that contribute to the developmental process of the students' cognitive and personal progress and therefore it entails all educational stakeholders' contribution (school institution, teachers) including governmental policies, social structures and sectors (UNESCO, 2011).

Both in the world and in Greece there seems to be a great interest in the issue of educational evaluation and the majority of educational institutions and policy makers agree that the evaluation of education should aim at its contribution to the development of knowledge through properly structured educational curricula (Muskin, 2015). They also argue that evaluation of education should aim at enabling school institutions to choose, as objectively as possible, the appropriate educational personnel for their purposes, because as they purport, teachers constitute an important factor to the development of students' knowledge (Brabeck et al., 2014). Furthermore, evaluation should aim at becoming a tool for continuous improvement of the quality of educational work (Kanjee and Sayed, 2013) implemented by each educational institution, as its practices and educational decisions (methods, materials, approaches) affect student progress.

### **Educational factors involved to be evaluated**

By using the term "Evaluating education" we hereby refer to the systematic process of checking the extent to which the educational objectives are fulfilled. These goals refer primarily to students' educational progress as well as to their personal and socio-cultural development. However, this systematic process also entails a variety of other equally important areas and factors such as: available resources, study programs and educational material, curricula, teaching personnel, administrative framework, institutional framework, pedagogical status, teaching and learning procedures and educational achievements (UNESCO, 2011).

Thus, the evaluation of education focuses at detecting and identifying all the factors that obstruct a satisfactory fulfilment of the educational goals and purposes and seeks the necessary feedback for possible interventions, changes or modifications needed. Evaluation therefore basically aims at improving and ensuring the quality of education, implementing educational programs successfully, employing and supporting human resources, enriching teaching aids, enhancing teachers' participation in the educational process and detecting both theirs and their students' educational needs (Scheerens et al., 2012).

To this end, the evaluation of education focuses on all the factors that are included in the educational process which aim at the improvement of the educational outcomes as a whole (Tremblay et al, 2012). It seeks quality improvement of all educational stakeholders and processes; it offers continuous feedback and aims at a pedagogical

and communicative relationship between all participants (authorities, teachers, students); it is interested in a continuous improvement of teaching practices in the classroom and teachers' scientific, professional and personal development; it seeks to upgrade the quality of school life, and offers appropriately designed educational programs and courses and all the necessary tools for better and more effective teaching and managerial practices (NEA, 2000).

The evaluation of education also aims to ensure equal opportunities and access of all students to the educational process; it detects weaknesses and problems that impede learning; it encourages and promotes educational change if and when needed; it nourishes a "self-evaluation" culture of both the institution, personnel and students' practices so that evaluation is considered as a way to improve each participant's skills and the institutions' profile (OAPA,1999).

### **Teachers as key factors to educational effectiveness**

The quality of teachers as key factors in the educational process depends on their cognitive background and their interaction skills in the daily school practice. Therefore teachers should not only be assessed based on their scientific knowledge but also on their professional and personal moral, social skills, and art of teaching. This is needed because teachers can help students gain valuable educational results and organize their creative, social and communicative skills. It is claimed that "the core of the purpose of teacher assessment and evaluation should be to strengthen the knowledge, skills, dispositions, and classroom practices of professional educators" (NEA, 2000). With these qualities being augmented, teachers do not only have the ability to enhance their teaching effectiveness but they can also lead their students to learning improvement and offer them the support they need to develop their skills and learning outcomes. According to NEA (2000) evaluation is also significant "for determining whether teachers are, in fact, acquiring and applying the content, skills, and dispositions necessary to meet school and district standards for student learning". The knowledge of the correlation between teacher practices and course objectives is important as teaching methods and approaches affect the way students learn and therefore constitute one of the key factors to their progress. It is also argued that educational assessment and/or evaluation offers significant feedback to the teacher, pointing out whether the lessons should continue as they are or modifications and alterations should take place, what should be repeated, what should be focused on and in what way the teaching approaches employed should proceed from then on (William, 2013).

### **Educational courses and programs as basic factors to be evaluated**

By course-based evaluation we refer to "methods of assessing student learning within the classroom environment, using course goals, objectives and content to gauge the extent of the learning that is taking place" and involves "taking a second look at materials generated in the classroom so that in addition to providing a basis for grading students, these materials allow faculty to evaluate their teaching" (Palomba, & Banta, 1999). According to the California State assessment plan, effective program assessment is systematic, it is built around the department mission statement, it is ongoing and

cumulative in order to bring evidence to improve the program, it is multi-faceted and faculty-designed and implemented (OAPA, 1998). Similarly, program assessment refers to the fact that "When developing and implementing assessment strategies, academic units should have at least one of three purposes in mind: to improve, to inform, and/or to prove. The results from an assessment process should provide information that can be used to determine whether or not intended outcomes are being achieved and how the programs can be improved. An assessment process should also be designed to inform departmental faculty and other decision-makers about relevant issues that can impact the program and student learning" (OAPA, 1999). Similarly, and according to Arend (2006) course evaluation is important because it affects student learning and is a key element to the quality of learning that takes place in school. Therefore, when assessment takes place all the data collected are exploited accordingly so as to determine the extent to which courses and programs "satisfy the learning outcomes" leading to any changes, supplementary material or refinement and redesigning of their content if needed (Miller & Leskes, 2005).

### **Evaluation/assessment tools in education**

A variety of tools may be used to assess/evaluate educational outcomes, teachers, learners or institutions (Moore and Williamson, 2008). These can be questionnaires, tests, diaries, descriptions, observations and more. Among these, questionnaires include questions of usually closed type that are used for data collection and look for information regarding facts, views, ideas, opinions, interests and so on. Questionnaires can be used for all types of assessment/evaluation whether this is internal or external, diagnostic, formative or summative. Especially summative evaluation/assessment is intended to receive the results of a process, to determine the overall effectiveness and usefulness of a training program and proceed accordingly with any appropriate and necessary interventions and/or changes and corrections. Questionnaires can address all educational stakeholders (authorities, teachers and learners) and are usually quantitatively analysed to produce measurable results. Questionnaires can be valid tools when the data collected can be reproduced by other researchers who have access to the same data and use the same research methods and tools (Roussos & Tsaousis, 2011). For the purposes of this research a questionnaire was developed to assess basic areas and factors of education: teachers, course programs and learners' involvement in the course.

### **Rationale of the research**

Evaluation and/or assessment are considered significant parts of education, teaching and learning and determine the extent to which the pre-set aims have been fulfilled (UNESCO et al., 2011). They are processes which influence all educational stakeholders' course of action, students' learning (Norliza and Siti Rozaimah, 2012), their progress and future steps, teaching needs, methods and approaches, curricula and material design. Given the importance of educational goals, it seems worth for educators to ask themselves a few critical questions such as: "How effective have our practices been so far?", "Have we been teaching what our students really need?", "To what extent our programs are appropriate and effectively designed for the purposes they are intended for?", "Is there anything we should do to

improve our materials, methods and teaching approaches to perhaps enhance student learning, if and when needed?". As educators ourselves and with the above critical questions in mind and being concerned for possible answers we decided to develop a questionnaire as our first effort and step to assess a few of the basic factors for educational effectiveness: teachers, programs and learners' involvement in the course. The questionnaire aimed to evaluate these factors at Vocational Training Institutes, known in Greece as IEK. Due to word limitations in this paper we only focused on the above factor/areas. However, this has been a pilot study, as more factors are being evaluated and a bigger number of participants are involved as a continuation of this study, the results of which will follow in another version.

### **Research method**

As aforementioned, data collection and data processing methods constitute key elements of any research approach. It seems that the most appropriate way of doing this is the use of an appropriately structured questionnaire, with specific evaluation axons, reliability and validity, which records the participants' responses to specific factors and appropriately formulated questions, the data of which can be easily quantified and measured.

### **Purpose of the research and research questions**

The research, which was conducted using both qualitative and quantitative research methods aimed at the development of a brief research tool in order to investigate whether it can be used to evaluate some basic educational factors and their efficiency level: teachers, teaching subject and students' involvement. Additionally, the research aimed at investigating the extent to which factors like the participants' gender affected their responses. Therefore, the research questions were the following: a) to what extent can the developed questionnaire be used for the evaluation of the educational factors such as teachers, course and students' involvement in a Vocational Training Institute courses? b) to what extent does the gender of the respondents affect their answers?

### **The sample**

The sample of the study consisted of 73 randomly selected adults, 45 men and 28 women, aged over 18 years old. They were all graduates of Vocational Secondary High Schools and now attended Vocational Training Institute programs in Volos, Greece, as a continuation of their studies in a next level, namely called "after secondary level studies".

### **The research tool- questionnaire development**

For the purposes of this study, the first questionnaire draft was first piloted with 14 participants all of which attended lessons at a private institute for vocational training (IEK) in the research area. The participants answered the questionnaire, and were also asked to note down any words or phrases which were not clear enough to them. A discussion with the participants followed for clarification and explanation of any vague points. The participants' comments were recorded, elaborated, and based on them the final draft of the

questionnaire followed and was then delivered to the main study participants.

The final questionnaire consisted of two parts. The first part included questions which aimed at the participants' demographic data: gender, course of studies, age and place of residence. The second part consisted of 32 items which are presented in the following table (Table 1):

**Table 1: Basic assessment axons**

Basic axons	Number of questions	Teaching objectives
A. Course	1-8	Objectives - organisation of teaching subject - educational material - teaching
B. Student assessment procedures and tasks	9-15	Evaluation - Methods - Feedback
Γ. Instructor	16-21	Organisation - Teaching subject approach - Feedback
Δ. Laboratory	22-27	Laboratory tasks
E. Student-Trainees	28-32	Trainees' self assessment

The respondents had to reply on a five-point Likert scale with answers such as: 1. Fully disagree, 2. Disagree, 3. I am not sure, 4. Agree, 5. Fully agree. Examples of the items are given below:

1. The objectives of the lesson were clear (Assessing the teaching subject)
2. The instructor encourages students to ask questions and develop their critical skills (assessing the instructor)

### **Stabilizing the questionnaire**

When using a research tool, regardless of whether it is already stabilized or created for the needs of a particular research project, we must make sure that both its reliability and validity are checked. The content validity of a research tool should be checked regardless of whether the assessment is criterion referenced or norm referenced or aims at detecting the participant's cognitive improvement (ipsative assessment). The reliability of a research tool indicates the extent to which there is stability of measurement or agreement between repeated measurements under the same conditions. Similarly, validity indicates the accuracy of what is being measured, in other words, the ability of a research tool to measure what it was designed for. A research tool may be reliable but not valid, but its validity ensures its credibility.

### **Checking the validity of the questionnaire**

In order to check the validity of the questionnaire, the content and construct validity were examined.

#### **A. Content validity**

For the questionnaire content validity, the questionnaire was initially given to a group of instructors who worked at a Vocational Training Institute (IEK), who checked the questionnaire items in relation to its objectives and tried to detect the extent to which its items questioned what they were design to question. The instructors

checked the questionnaire and found that there was a correspondence between goals and questions and therefore the questionnaire presented content validity.

**B. Construct validity**

The construct validity of the questionnaire was checked with a group of students answering it, and then by interviewing them in this pilot phase of the questionnaire. More specifically, the questionnaire was initially given to a small group of students (eight students), and then individual interviews also followed with the participants. According to the results of the pilot survey and based on the interviewees' comments, the questionnaire items were fully understood by the majority of the participants. However some of the questions needed further clarification and that mainly had to do with few language terms such as the word "epikodomitikos" (effective in Greek), or "sigrama" (college or university publication in Greek) which were fully explained followed by relative examples. Thus, and based on these results, the questionnaire of the test exhibits also construct validity. After all comments had been recorded the final version of the questionnaire was developed to be handed in for the main study.

**Checking the reliability of the questionnaire**

The internal reliability of the questionnaire used was checked with the Cronbach alpha internal consistency coefficient (Roussos & Tsaousis, 2011). This index takes values at (0,1). The value (0) is interpreted as lack of reliability whereas the value (1) as highly reliable scale. According to Roussos and Tsaousis, (2011), the lowest acceptable limit for an index of reliability is around 0,7 (values that are higher than 0.7 indicate acceptable reliability), whereas the more heterogeneous the question items are the lower the factor of the internal consistency of reliability is expected to be. In this paper, and for the purposes of this study, the statistical analysis of the data received was implemented with the Statistical Package for social sciences (SPSS) V.24.0 software (SPSS Inc., Chicago, II, U.S.A). The analysis of the results showed that the reliability of the questionnaire regarding its internal consistency and construct validity are confirmed by the Cronbach  $\alpha$  coefficient, which was found to be 0.896 for all questionnaire items, as shown at Tables 2 and 3 below:.

**Table 2: Basic Cronbach's a coefficient of reliability for all questionnaire items**

Reliability Statistics	
Cronbach's Alpha	N of Items
0,896	32

**Table 3: Cronbach's a coefficient of reliability and correlation for all questionnaire items, removing a question**

Item-Total Statistics		
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The objectives of the lesson were clear	0,452	0,890

The teaching material was relevant to the objectives of the lesson	0,337	0,892
The teaching subject content was well organized	0,539	0,884
The educational aids and material contributed to the understanding of the content of the lessons	0,330	0,892
The educational material was delivered in time	0,211	0,898
The educational material was appropriate	0,417	0,888
The educational material had a cross-curricular and interdisciplinary approach	0,420	0,892
The lessons were difficult	0,075	0,915
The assessment criteria were transparent	0,320	0,895
The time allocated for assessment was adequate	0,538	0,886
The deadline for submitting the presentation of tasks was logical	0,252	0,894
There was appropriate guidance by the instructor for the tasks	0,596	0,884
The instructor's comments about the tasks were constructive	0,569	0,884
The students were given the possibility to improve their tasks	0,372	0,893
The tasks enhanced the understanding of the subject taught	0,491	0,889
The lessons were well organized and presented by the instructor	0,561	0,887
The instructor used stimulating and motivating activities	0,569	0,886
The lessons were analyzed in such a way by the instructor that they were comprehensive	0,498	0,888
The students were encouraged by the instructor	0,383	0,892
The instructor was consistent with his/her obligations	0,410	0,893
The instructor was friendly	0,585	0,884
I attended the lectures given	0,097	0,902
I participated in the laboratory work	0,204	0,898
I responded to the tasks assigned	0,405	0,893
I studied on a regular basis	0,343	0,894
I studied the lesson on a weekly basis	0,265	0,904
The level of laboratory tasks was difficult	-0,005	0,884
The notes given for the laboratory tasks were adequate	0,419	0,902
The basic principles of the experiments and tasks were well explained	0,332	0,898
The laboratory equipment was sufficient	0,394	0,893
The objectives of the laboratory tasks were clear	0,324	0,894
I devoted adequate time to respond to the demands of the laboratory tasks	-0,063	0,904

Omitting successively each one of the 32 questionnaire items different Cronbach's  $\alpha$  values result between (0.884-0.915) in the pilot phase of the survey. The final version of the questionnaire, as it finally developed, is considered a valid, reliable and effective tool for the evaluation and the investigation of the main factors of private and public Vocational Training institutions (IEK).

### Data collection process

The research was conducted in spring 2017 and the data was collected by the end of May 2017. Before administering the questionnaires, the institutions instructors and the head managers were informed about the research and its purpose and their consent was taken. As a next step, students were also informed and were asked for their consent which was



given with few exceptions of students (two) that did not wish to participate in the research. The rest of the participants (73) who agreed to take part in the research were administered the questionnaire which they completed in class, before the beginning of their lessons so as not to impede their learning. The total duration of the questionnaire filling did not exceed 12 minutes at the most. All respondents were first given explanations regarding the questionnaire filling and the fact that they could withdraw any time they wished. For clarification purposes however, written instructions were also available at the beginning of the questionnaires. The respondents were asked to give as sincere answers as possible as this would not affect their performance in any way, given that the data served only the purposes of the research and that all questionnaires were anonymous for ethical reasons. Additionally, all participants were explained that, upon completion of the research, they could have a copy of the survey results, if they wished.

### **Validity and reliability of the research**

As aforementioned, the 73 participants were randomly selected. This number was considered adequate for the research purposes as, according to Cohen et al., (2008), because of the practical difficulty of research data collection from the entire population, there was an effort to have a representative and homogeneous sample of participant students of the IEK departments, who reflect the target population as a whole.

### **Ethical issues of the research**

Ethics is a very important issue in any research effort and should be focused on. Therefore, participants were fully informed on the purposes of the research before the actual study and were asked for their written consent. This also applied to the institutions teachers and head managers. What is more, and for ethical reasons, all questionnaires were anonymous and had no indication regarding the participants' personal or other profile. Furthermore, there was an effort for all the participants to feel at ease and be explained and clarified any vague points they had regarding the questionnaire items and that they could withdraw any time if they wished so.

### **Determining the research variables**

A key element of any research strategy and statistical analysis is the determination of the independent and dependent variables of the research. In the present study, the demographic characteristics of the respondents, namely gender (level 1: male, level 2: female) were considered to be the independent variables. As dependent variables were considered the main axons of the questionnaire, namely a) course, measured with questions 1-8, b) student assessment procedures and tasks, measured with questions 9-15, c) the instructor, measured with questions 16-21, d) the students-trainees, measured with items 22-27, and e) the laboratory tasks, measured with questions 28-32.

The selection of the appropriate statistical method followed to compare the dependent variable measurements among the different groups in order to provide possible answers to the research questions. The appropriate parametric criterion for this case is considered the t

Test of independent samples because the independent variable has two levels.

## Results

The demographic features of the sample

The demographic features of the sample constituted the independent variables of the research. For the purposes of this research these referred to the gender of the participants. Therefore 61,6% of the respondents were male and 38,4% of them were female (Table 4)

**Table 4: Participants' gender**

Gender	Frequency (%)
Males	45 (61,6)
Females	28 (38,4)
Total	73 (100,0)

## Participants' evaluation reports

The results concerning the basic axons of the questionnaire are presented on table 5 below. In the same table the average means and standard deviations of the dependent variables are presented, according to the respondents' answers. For each scale the average of each answer was calculated. As it can be seen, the average for the teaching subject for the total of the respondents is  $M=4.45$  (S. d.=.33). The average for the course assessment is  $M = 4.78$  (S. d. = .35), the average for the instructors' evaluation is  $M = 4.81$  (S. d. = .33), the average for the participants' self-evaluation is  $M = 4.16$  (S. D. = .50) and the average for the evaluation of the laboratory is  $M = 3.27$  (S. D. = .54). The above values refer to a scale from 1 to 5. This means that the participants of the vocational training institutes have a good understanding of the subject, evaluation of the teaching subject, the trainer, and their self-assessment, while their view for the laboratory activities is generally less positive.

**Table 5: Average means and Standard deviations of the dependent samples**

	Mean	Std. Dev.
Evaluation of the course	4,45	,33
Evaluation of student assessment procedures and tasks	4,78	,35
Evaluation of the instructor	4,81	,33
Student self-evaluation	4,16	,50
Evaluation of the laboratory	3,27	,54

## The influence of the student gender on the key evaluation axons

Table 6 presents the average means and standard deviations in the evaluation axons regarding gender

**Table 6: Average means and Standard deviations regarding gender**

	Males		Females	
	Mean	Std. Dev.	Mean	Std. Dev.
Evaluation of the course	4,43	0,35	4,49	0,31
Evaluation of student assessment procedures and tasks	4,79	0,26	4,77	0,48

Evaluation of the instructor	4,79	0,32	4,85	0,35
Students' self-evaluation	4,12	0,53	4,22	0,46
Evaluation of the lab.	3,34	0,50	3,17	0,61

The t Test results of independent samples did not show a significant influence of the participants' gender on the evaluation axons, with p-value in all cases being higher than 0,05, which means that even though there was some difference between the genders, this difference was not statistically significant (Table 7).

**Table 7: t Test results**

	t	df	Sig. (2-tailed)
Evaluation of the course	-0,664	71	0,509
Evaluation of student assessment procedures and tasks	0,243	71	0,808
Evaluation of the instructor	-0,702	71	0,485
Students' self-evaluation	-0,797	71	0,428
Evaluation of the lab.	1,330	71	0,188

### **Conclusion, limitations and implications**

The main purpose of this research was the effective implementation of a flexible and relatively brief tool to collect students' views regarding private and public Vocational Training Institutes and their practices. Implementing such a tool is quite a laborious work due to the many parameters involved. Based on the results of the research it can be argued that the general idea deriving from the respondents' expectations on the provided education in the Vocational Training institutes is positive in four out of the five axons of the questionnaire. These relate to the evaluation of the course with (MD: 4,45 ± 0,33), the evaluation of assessment practices and tasks (MD: 4.78 ± 0.35), teacher evaluation (MD: 4.81 ± 0.33), trainees' self-evaluation (MD: 4.16 ± 0.50), whereas the evaluation of the laboratory tasks, though it was not very low, it ranged at moderate levels (MD: 3.27 ± 0.54).

Based on the results that relate to the effect of the participants' gender in the five basic evaluation axons it can be said that the average means of the females' evaluation at four axons (course evaluation, assessment practices and tasks evaluation, instructor evaluation and student self-evaluation) are higher than the average means of the male participants, but they are not statistically significant. However, at the evaluation of the laboratory tasks, the average means of the females' evaluation was lower than that of the males' but again not statistically significant. This partly shows that the participant male respondents addressed the particular issue (laboratory tasks) in a more positive way than their female partners.

In conclusion, the suggested evaluation tool, which was checked for its validity and credibility, offered us an interesting perspective regarding the provided educational training at Vocational Training Institutes (IEK). As aforementioned, this research constituted a first attempt to develop a useful, flexible and brief evaluation tool for the evaluation of the provided education at IEK. Nevertheless, there were some limitations at its implementation which relate to the following: Firstly, it had to do with the one data collection method used in comparison to triangulation which could have been used (the

use of multiple data collection tools, such as questionnaires, observation, diaries, note-taking, interviews). Secondly, the measurement of the research variables was based on the use of an auto-reference questionnaire. The use of such tools displays a number of constraints, despite its advantages, as it confines the information received only to what the participants themselves are willing to provide (Roussos & Tsaousis, 2011). Thus, in some cases, the participants may exaggerate or conceal information, maintaining a defensive or self-protective attitude regarding the questions being asked. In the next phase of our research we kept this fact in mind and put an effort into having a more holistic view of self-efficacy formulation, based on interviews and students' descriptions and discussions.

As concerns the sample of the research, this derived only from Volos region. This means that the generalization of the findings only concerns the specific geographical area. Nonetheless, the findings of the survey do reveal the basic views of the respective population groups regarding the evaluation of key stakeholders and practices in Vocational Training Institutes, which we believe is quite an important fact. Furthermore, the number of female participants was quite lower than that of the male respondents, which was another limitation. Therefore, in the continuation of our research we attempted to have a bigger sample of women participants in order to make the generalization to the male and female population easier so as to have more representative results on how gender affects the evaluation of Vocational Training Institutes.

## References

- Arend, B.D., (2006), "Course Assessment Practices and Student Learning Strategies in Online College Courses," *Journal of Asynchronous Learning Networks*, **11**(4), 3-17.
- Brabeck, M.M., Dwyer, C.A., Geisinger, K.F., Marx, R.W., Noell, G.H., Pianta, R.,C. & Worrell, F.C., (2014), *Assessing and Evaluating Teacher Preparation Programs*, APA Task Force Report, Washington: American Psychological Association.
- Brown, J., (2000), "Questions and answers about language testing statistics: What is construct validity?," *Shiken: JALT Testing-Evaluation SIG Newsletter*, **4**(2), Oct. 2000, 8-12.
- Haynes, S.N., Richard, D.C.S. & Kubany, E.S., (1995), "Content Validity in Psychological Assessment: A Functional Approach to Concepts and Methods," *Psychological Assessment*, **7**(3), 238-247.
- Jabbarifar, T., (2009), The importance of classroom assessment and evaluation in educational system, *Proceedings of the 2nd International Conference of Teaching and Learning (ICTL 2009)*, INTI University College, Malaysia.
- Kanjee, A. & Sayed, Y., (2013), Assessment policy in post-apartheid South Africa: challenges for improving education quality and learning. *Assessment in Education: Principles, Policy & Practice*, **20**(4).
- Kokkineli, K., (2017), *Assessing the school environment from the point of view of Primary education teachers in the Prefecture of Ioannina*, A Dissertation study, University of Ioannina, School of Educational Sciences, Pedagogical Department of Primary Education, Postgraduate programme of studies, Organization, Management and Evaluation of Education.

- Miller, R. & Leskes, A., (2005), *Levels of Assessment, From the Student to the Institutions*, Washington: Association of American Colleges and Universities (AAC&U).
- Moore, I. & Williamson, S., (2008), *Engineering Subject Centre Guide, Assessment of Learning Outcomes*, The U.K.: The Higher Education Academy.
- Muskin, J.A., (2015), *Student Learning Assessment and the Curriculum: Issues and Implications for policy, design and implementation*, In-Progress Reflections, No 1 on Current and Critical Issues in the Curriculum and Learning, IBE, UNESCO International Bureau of Education.
- NEA Foundation for the Improvement of Education (2000), *Engaging Public Support for Teachers' Professional Development*, Washington, D.C.: National Education Association.
- Norliza Abd Rahman & Siti Rozaimah Sheikh Abdulah (2012), Assessment Tool of Course Learning Outcomes for Mechanical Design of Process Equipment, *Procedia Social and Behavioural Sciences*, **102**, 116-121.
- Office of Academic Planning and Assessment (OAPA), Stassen, M. L. A., Doherty, K. & Poe, M., (1998), *COURSE-Based Review and Assessment Methods for Understanding Student Learning*, Massachusetts: University of Massachusetts Amherst.
- Office of Academic Planning and Assessment (OAPA), Stassen, M. L. A., Doherty, K. & Poe, M., (1998), *PROGRAM-Based Review and Assessment Tools and Techniques for Program Improvement*, Massachusetts: University of Massachusetts Amherst.
- Palomba, C.A., & Banta, T.W., (1999), *Assessment Essentials: Planning, Implementing and Improving Assessment in Higher Education*, San Francisco: Jossey-Bass Publishers.
- Roussos, P.L. & Tsaousis, G., (2011), *Statistics in Behavioural sciences using SPSS*, Athens: TOPOS.
- Scheerens, J., Ehren, M., Slegers, P. & de Leeuw, R., (2012), *OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes*, Country Background Report for the Netherlands, University of Twente, the Netherlands.
- Tremblay, K., Lalancette, D. & Roseveare, D., (2012), Assessment of Higher Education Learning Outcomes, *AHELO, Feasibility Study Report, 1*, Design and Implementation, OECD.
- UNESCO, IIEP, PEIC & IBE (2011), *Assessment and Monitoring and Evaluation; How will we know what students have learned? Safety, Resilience, and Social Cohesion: A Guide for Curriculum Developers*. Paris: International Institute for Educational Planning.
- William, D., (2013), "Assessment: The Bridge between Teaching and Learning," *Voices from the Middle*, **2**(12), 15-20.