

THE INTEGRATION OF EXPERIENTIAL TECHNIQUES IN ADULT EDUCATION AND THE FACTORS INFLUENCING THEIR ADOPTION



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ABSTRACT

The present research is a quantitative approach to the experiential learning provided in adult education. It focuses on the investigation of the experiential teaching techniques adopted and applied by adult educators at Vocational Training Institutes (VTI), based on their individual and work characteristics. The sample consisted of 317 instructors of public and private VTI, which was a product of inventory sampling, and was conducted at national level. A standard questionnaire, that was prepared for the needs of this research was used as a research tool. The results of the research are presented through descriptive, but also inductive statistical methods and confirm that adult educators use a variety of experiential teaching techniques in their work, with some of them being more preferred than others that seem to be less popular. In addition, the individual-work characteristics of educators affect, in some cases, the degree and intensity with which they utilize some experiential techniques, during the teaching process.

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1. INTRODUCTION

Experiential learning focuses on the use of experience during the learning process, suggesting the essential search for meaning in learning objects and not the simple memorization and transfer of sterile information. The utilization of experiential activities pursues the mental and emotional activation of the learner, who creates new learning experiences through transformative processes. The experience, the background and the wider social environment of the individual play an essential role in the learning process.

The experiential actions are not characterized by stagnation and rigidity, as often happens in the context of formal traditional teaching. These are educational tech-



niques that develop a variety of functions, underlie flexibility and fluidity, as different people approach the same issue in a unique way. They devote different amounts of time to it, relate it to their personal system of interests and based on the principles of experiential learning, they extract their most appropriate experiences that have a positive educational value for them.

Experiential learning requires – in addition to the active participation of learners and trainers – open educational processes, as well as flexible and adaptable curricula. The operating framework of VTI, as well as the provisions of the study guides of the offered majors, offer a very fertile ground for the cultivation and development of experiential activities. The internship, the apprenticeship, the practical application of the major and the educational visits are the most suitable fields for application of the experiential learning at VTI.

Educational – Teaching principles of experiential action planning.

The effectiveness of the adopted experiential actions depends on the methodological planning, the means and the conditions of implementation, the personality and skills of the instructor, but also the characteristics of the trainees. According to Matsagouras [Matsagouras \(2012\)](#), their planning is based on four basic educational-teaching principles: the principle of experiential learning, the principle of interdisciplinary approach to issues, the principle of differentiated teaching and the principle of collaborative research.

The principle of experiential learning puts learning as the product of direct experiences, which must be processed methodically to identify possible correlations with new knowledge, but also to achieve a reflective function, which is important for its consolidation. Special attention is required in the intensity and persistence of the educators in regards to the implementation of experiential learning. The excessive zeal and overload with an abundance of experiences and requirements of the learners, can create confusion and fatigue, reducing their mental resilience and zeal towards the learning process [Matsagouras \(2012\)](#).

The principle of the interdisciplinary approach to the subjects of the learning objects is an important educational practice, as it is based on the connection of more than one perspective on a subject, aiming at its multifaceted study and the enrichment of the overall educational experience. This is not a simple approach, where the same object is taught simultaneously by several different specialties. Interdisciplinary techniques are something much bigger, as they allow learners to see different perspectives, work in teams, reflect critically with the aim of synthesizing scientific knowledge on different disciplines [Jones \(2010\)](#).

The principle of differentiated teaching is a teaching approach during which teachers choose to apply alternative strategies, means and rhythms of teaching, targeting students with different abilities and needs. It requires good organization and planning, often following interdisciplinary collaboration with other specialties. It aims to activate each student individually, in order for them to overcome every difficulty and succeed in building new knowledge with individual effort and per-

sonalized support. A basic condition for the effectiveness of the approach is the identification of the special characteristics, needs but also the weaknesses of each student, along with the ability of the teachers to meet these requirements, through appropriate planning and structuring of the teaching, in order for the educational goals to be fulfilled [Wenning and Vieyra \(2020\)](#).

According to the principle of collaborative exploration, learning although an individual achievement, takes place in a context of interaction and cooperation. According to Matsagouras [Matsagouras \(2012\)](#), this finding is also supported by Vygotsky in his theory on the “Upcoming Development Zone”, based on which through interaction and collaboration, individuals overcome their personal limits of thought and action and make the first step towards the next level of improvement, with the team’s support. In this group context, they get familiar with and consolidate the new acquired knowledge and transform it into a personal skill.

Experiential educational techniques in adult education

Educational techniques are specific educational “tools”, based on which the teaching of learning objects is methodized and built. Through experiential educational techniques, especially in adult education, the active participation of the learners and the interaction with the teacher is promoted [Masalimova et al. \(2016\)](#). Given that the effectiveness of each technique depends on a variety of factors, it is important to choose the most appropriate one in every case. A technique is not characterized as experiential because of its type or structure, but thanks to the general spirit that underpins its design, organization and implementation.

According to Koulaidis [Koulaidis \(2007\)](#), educational techniques could be classified into five categories based on their content and methodological approach: a) Exploration techniques: Search for knowledge by the learners themselves, e.g. working groups, conversation, b) Application techniques: They allow trainees to use knowledge they have acquired, e.g. exercises, c) Presentation techniques: Presentation of an issue by the learners, e.g. discussion and demonstration, d) Guiding techniques: Emphasis on the collaborative development of cognitive content by the teacher and the learners, e.g. role playing, brainstorming, discussion and e) Discovery techniques: Students follow a mental tiered process for the acquisition of knowledge, e.g. various forms of simulation [Moustakas and Moustaka \(2019\)](#).

The following are indicative of the most important experiential techniques, the adoption of which in the educational process is the combined result of: the purpose and the goals of the educational program, the type and content of the learning object, the level and characteristics of the learners, the skills and the experience of the teacher, the existing culture of the educational organization, the learning climate of the team, the available time and material and technical resources [Ioannou and Athanasoula-Reppa \(2008\)](#).

Role playing games

Role play is an educational technique that promotes the active participation of learners and collaborative learning. It is suitable for teaching difficult and demanding

concepts, which require the representation of a function or an event in order to be easier understood. The members of the team, in which the teacher can also take part, are encouraged to get involved in the learning process, express their opinions and get active in a safe environment. At the same time, participatory learning is enhanced, with an emphasis on the process of acquiring knowledge and not the result itself. The technique allows the study of an object from different perspectives, by changing the original data, adding or removing elements and parameters, as no special equipment is required for its application [Moustakas et al. \(2008\)](#).

Brainstorming

Brainstorming is a participatory process during which students associatively recall pre-existing perceptions and express their ideas on a specific issue freely and spontaneously. This technique achieves the investigation of various dimensions of the issue or concept being studied, through the recording of all ideas, discussion and grouping them into categories [Styliaras and Dimou \(2015\)](#). An important factor in the whole process is the mobilization of students to participate spontaneously and share freely their ideas.

Case study

The technique of case study is used when the trainees are suggested with a specific thing to study, which is relevant to the content of the learning object. They are called to delve into it and search for solutions and proposals regarding the individual issues they identify and reckon they characterize specific case [Koulaidis \(2007\)](#). It is a student centered technique, during which the trainees are activated, decide on the way they will act and form a generally positive attitude towards the research approach. At the same time, they take responsibility for possible mistakes and identify essential criteria in regards to the control of the cases [Brinia et al. \(2017\)](#). This way enhances the development of sharing and analysis of problems and situations skills and cultivates critical thinking and approach. The individuals become familiar with the solving of complex and multifaceted issues, such as the issues they face in their lives, both personal and professional.

The “project” method

The action plan method is a product of the American Progressive Education Movement. It was first captured and demarcated by William Heard Kilpatrick in 1918, who argued that this educational approach promotes critical thinking, innovative action, and adaptability to new social conditions [Pecore \(2015\)](#). It applies to both education, work and adult education, helping individuals to learn more effectively through experience [Kolb \(2014\)](#). Experiential learning, achieved through this teaching technique, creates favorable conditions for transformational learning [Nicolaidis and Dzubinski \(2016\)](#). It affects important structural elements of the educational process such as content, educational practices, soft skills, collaboration and self-directed learning.

Mutual Learning

The term mutual learning refers to the form of teaching, in which knowledge is transferred from one student to another. Mutual learning between learners is a fea-

sible active learning opportunity, which can be particularly effective when individuals communicate to their classmates the knowledge and skills they possess thanks to their professional careers [Dunleavy et al. \(2017\)](#). Individuals are motivated to participate in the educational process, while developing teaching skills. Through this new role, the trust between the trainees is strengthened, the awareness of the requirements and the difficulties of the role of the trainer is cultivated, the interaction is promoted and the communication skills are also cultivated. Finally, the self-organization of the educational process, the self-regulation of the roles is achieved and the feeling of self-discipline is promoted.

Simulation

Simulation is an educational technique where individuals participate in a mental and realistic representation of a situation, trying to feel, think and act as if events were actually happening. By penetrating the reality of the imagination, the trainees seek to understand more deeply its various aspects, so that they can behave effectively in similar situations [Zhang et al. \(2016\)](#). Therefore, simulation is an educational technique that is similar to role-playing, except that they are not called to act in a theatrical way. The goals must be clearly defined and accompanied by clear instructions [Moustakas and Tsakiris \(2017\)](#).

Immediate experience activities

The technique of immediate experience activities includes educational activities in which learners actively participate in the search for knowledge, through direct observation activities in museums, professional spaces, exhibitions or through research in historical archives, libraries, etc., using questionnaires or conducting interviews.

Designing such authentic learning activities offers learners the opportunity to improve their experiences and achieve a deeper understanding of cognitive content. It helps students master the cognitive content, process the objectives more effectively than in the traditional teaching techniques [Edelson \(2001\)](#), as well as cultivate their social skills.

Field study

Field study as a teaching approach concerns the transition from theoretical training within the classroom to experiential learning in outside fields and learning environments. This educational technique combines the knowledge acquired at a theoretical level with their application in practical actions, through interaction with real environments. With this process, learners are introduced to new experiences, as they build and develop environmental awareness [Girtzi \(2016\)](#). The design of the field study includes some stages which concern the decision for the implementation of the action, its planning and preparation, its connection and utilization in the course, the interpretation and search for meaning of the new knowledge, the presentation of conclusions and finally its feedback and evaluation.

Dramatization

Theater Pedagogy as an educational practice enriches the learning process with applications from the theater. It is a widespread methodological tool, which according to [Lenakakis \(2013\)](#) has a morphoplastic character and leads to the change of interpersonal relationships. It gives an innovative character to the knowledge delivery system and contributes to bridging the gap between standard educational practices and the use of improvisation in the teaching process. Common techniques used in dramatization are the frozen image, the shaping of the imaginary environment, the detection of thoughts, role playing, the ritual, the investigative chair, the corridor of consciousness, the imitation, etc. [Kontogianni \(2012\)](#).

Round table - debate

Structured debate is an appropriate educational technique that enhances the development of argumentation and improves the expressiveness of learners, following a series of actions that promote critical thinking [Mumtaz and Latif \(2017\)](#). The steps required to implement the technique are based on the introduction of an issue to be studied, the appointment of a coordinator for the whole process and the division of the plenary session into two groups. Subsequently, the roles that individuals take on within the groups are identified, as well as the rules that govern the process. The appropriate material to be studied is distributed and the appropriate argumentation is substantiated and prepared, in order to be used in the context of the debate. Discussion and exchange of arguments follow and the educational process is completed with the evaluation of the performance of the two groups, based on specific criteria.

Creative expression activities

Creative expression activities take place in a variety of spaces, with the aim of promoting lifelong learning, unleashing one's inner potential and interacting with others. Places where programs or creative activities for adults are offered can be museums, cultural centers, workshops, specialized schools, seminars, etc. The purpose of the technique is to familiarize learners with the cognitive content and to provoke reflection through connection with past experiences or the recall of pre-existing knowledge. Individuals learn experientially, collaborate, interact, train, reflect, express themselves through creative activities, identify and highlight their special interests [Atkins \(2019\)](#). The participation of adult learners in methods or processes related to creativity, can be the basis for enriching their professional skills and improve their decision-making ability [Moustakas and Tsakiris \(2018\)](#).

2. MATERIALS AND METHODS

Survey Methodology

Purpose - Objectives - Searching questions

The purpose of this research is to investigate the methods of implementation of Experiential learning, especially in the context of vocational education and training.

It is addressed to adult educators of public and private VTI, at national level and its objective is to capture the experiential educational techniques adopted mainly by educators and to explore the role of individual and work characteristics in the selection and application of experiential practices. Considering the purpose and individual objectives of the research, but also the information obtained from the previous literature review, the research effort focuses on the following research questions:

1. What experiential teaching techniques do adult educators apply in vocational training?
2. Do the individual-work characteristics of VTI trainers influence the utilization of experiential teaching practices?

Population - Sample

Given that the field of vocational education and training operates within a limited regulatory framework, the most appropriate method for this research was the quantified presentation of multiple findings. In other words, the quantitative approach was adopted, which allows the standardization of the data collected and ensures the possibility of approaching a numerically significant part of the population [Cohen et al. \(2008\)](#).

In this study, the population is all adult educators who serve in Institutes of Vocational Training (VTI) in Greece, both public and private and use experiential methods in their teaching. The sampling was conducted with an inventory approach for data collection and utilization, at national level, where 317 people, 113 men and 204 women responded.

Research tool

The need to investigate experiential learning and teaching conditions in adult education over a wide geographical range led to choosing the questionnaire as a research tool. A standard questionnaire was designed in which questions of 4-point scale graded, ascending order, Likert type [Babbie \(2011\)](#), but also a few questions of simple classification of characteristics [Katsis et al. \(2010\)](#) were used.

The fact that the research was conducted in a period of health crisis (covid-19) and in fact the research part coincided with the 2nd universal lockdown for our country, affected the sampling process in terms of its application and control. However, despite these special circumstances, the sample was composed of a large number of adult educators who met the requirements and criteria set out during the creation of the study.

Research data analysis techniques

Prior to the statistical analysis of the research data, an internal consistency (reliability) check of the research tool was performed, utilizing the Cronbach's alpha coefficient [Tavakol and Dennick \(2011\)](#). The result for the axis of experiential techniques adopted was Cronbach's $\alpha = .797 > .700$, which confirms the reliability of the research tool.

A regularity test was then performed using the Kolmogorov Smirnov statistical criterion Siegel (1956), as the sample size was greater than 50 units ($n > 50$). From the results of the criterion, it was found that all the variables showed $\text{Sign} < 0.05$, which meant the rejection of the null hypothesis (H_0) and acceptance of the alternative (H_1), that is the values of the variables do not follow a normal distribution.

Descriptive statistics with frequency tables and percentages for each variable were used to present the demographic characteristics. Then all the operative variables (Likert) were analyzed descriptively, where, except for the frequencies and percentages, the index for measuring the central tendency of the respondents' responses (Average = Avg) and the index for measuring the dispersion of prices are presented (Standard deviation = SD).

After the completion of the descriptive statistical analysis, inductive statistical methods are used to check for statistically significant differences between the independent and dependent variables. Since the condition of regularity does not apply (Kolmogorov Smirnov criterion), non-parametric statistics were used to check the significance of the differences in the values of the variables.

For the independent variable "gender", because it is divided into two categories, the Mann-Whitney criterion of two independent samples was applied Siegel (1956). For the other six independent variables, which show more than two values, the Kruskal Wallis criterion was used Siegel (1956). Regarding the Kruskal Wallis criterion, in cases where statistically significant differences were identified, post hoc analysis of multiple comparisons was applied, using pairwise tables, to identify the categories on which the difference focuses.

The level of significance of the control of the statistical differences for both non-parametric criteria was $p < 0.05$ (5%).

3. RESULTS AND DISCUSSIONS

Results of descriptive statistical analysis

The research sample consisted of 317 people, 113 men and 204 women, 35.6% and 64.4% respectively. The age of the participants was searched based on the planning of age classes, where it is found that the age classes "30-39" and "40-49" are the most numerous, with 116 and 120 individuals and a percentage that amounts to a total of 74.5%. The next class is that of "50-59" years with 52 people, followed by "20-29", with the last category being >60 to which only six respondents belong.

Regarding the educational level, it appears that the majority of participants (55.5%) hold a postgraduate degree, while university and ITE (Institute of Technical Education) graduates correspond to 28.4%, followed by graduates of secondary education and holders of doctoral degrees with 8.8% and 7.3% respectively.

Most of the participants in the research seem to work in parallel with their professional capacity as adult educators. Specifically, 262 out of the 317 people of the sample state that they work in another field besides teaching at VTI. 34.4% are civil

servants, 24.6% private employees, 17% self-employed and 6.6% work part-time. Fifty-five people answered that they work exclusively as adult educators, which is 17.4% of the sample.

The vast majority of adult educators (73.8%) teach or have taught only in public Institutes of Vocational Education. 20 people (6.3%) have teaching experience only in private institutes, while 19.9% of the respondents, that is 63 people, have worked in both types of educational structures.

The distribution of the sample by geographical department of the country, with Central Greece and the Peloponnese showing the highest frequencies, recording 107 and 81 people and percentages of 33.8% and 25.6% respectively. The representation of Macedonia and the Aegean Islands is followed by percentages close to 10%, while Crete is very close with 7.3%. The response was slightly lower in the regions of Thrace (4.7%), Macedonia (4.4%) and Epirus (3.5%), while it was very limited by the geographical department of the Ionian Islands (0.6%).

Completing the demographic characteristics of the sample, it is found that a significant part (37.9%) have recently been included in the field of vocational education and training, as they have professional experience in Adult Education from 0 to 2 years. Many people have 3 to 5 years of professional experience (22.7%), but also more than 11 years (22.1%). Six to eight years of experience has 10.1% and eight to ten 7.3% of the surveyed population.

Table 1 Frequency distribution regarding the adopted experiential techniques in adult education. Average and standard deviation of the distribution

LEVEL OF AGREEMENT	Not at all		A little		Enough		A lot		INDEXES	
	N	%	N	%	N	%	N	%	Aver:	SD
Which experiential techniques do you use in your teaching?										
Role Playing	73	23.0	114	36.0	91	28.7	39	12.3	2.30	.960
Brainstorming	12	3.8	48	15.1	123	38.8	134	42.3	3.20	.830
Case Study	18	5.7	64	20.2	130	41.0	105	33.1	3.02	.873
Simulation	40	12.6	108	34.1	110	34.7	59	18.6	2.59	.932
The "Project" Method	60	18.9	95	30.0	105	33.1	57	18.0	2.50	.996
Practice	36	11.4	54	17.0	102	32.2	125	39.4	3.00	1.011
Field Study	98	30.9	123	38.8	70	22.1	26	8.2	2.08	.925
Immediate	23	7.3	70	22.1	126	39.7	98	30.9	2.94	.905
Experience Activities										
Dramatization	155	48.9	89	28.1	43	13.6	30	9.5	1.84	.990
Round Table - debate	143	45.1	81	25.6	68	21.5	25	7.9	1.92	.989
Creative Expression	99	31.2	85	26.8	80	25.2	53	16.7	2.27	1.078
Activities										
Mapping of Concepts	84	26.5	103	32.5	94	29.7	36	11.4	2.26	.976
Mutual Learning	83	26.2	102	32.2	88	27.8	44	13.9	2.29	1.006

The descriptive analysis of the results regarding the educational techniques applied by the adult educators in the Institutes of Vocational Education (Table 1), showed that the most popular technique is the brainstorming, which is preferred by 89.1% of the participants (average 3.20). Very close with also high percentages are the practice with 74.1% (average 3.02), the case study with 71.6% (average 3.00) and the immediate experience activities with 70.6% (average 2.94) of the participants stating that they use them quite a lot. Respondents' views on the educational technique of simulation are divided, with 53.3% (average 2.59) claiming to use this particular teaching process. Even more marginal are the responses regarding the project method, where 51.1% (average 2.50) respond positively, while 48.9 states that they do not often choose this technique.

The other experiential teaching techniques are ranked lower in the preferences of adult educators. Few, if any, 58.4%, 58% and 57% of respondents, respectively, use the techniques of mutual learning, creative expression activities and concept mapping. This is followed by the field study where 69.7% have also reported negatively, while the last in the preferences of the trainers are the approaches of the round table "debate" and the dramatization, with the percentages of those who adopt them a little to not at all amount to 70.7% and 77% respectively.

Results of inductive statistical analysis

After the presentation of the descriptive statistics, where the data were summarized and the intensity and quality of the individual variables in the sample to be researched were recorded, it was deemed appropriate to make concluding statistical comparisons. Statistically significant differences per independent variable were sought for each of the dependent variables.

Differences in regards to the gender

Table 2 Averages and standard deviations regarding the adopted experiential techniques, regarding the variable "Gender". Statistical significance test of the differences between the averages (Mann-Whitney Test)

GENDER	Woman		Man		Statistical Significance Test	
	Average	SD	Average	SD	U	P
Which experiential techniques do you use in your teaching?						
Brainstorming	3.28	.779	3.04	.900	9911.500	.026
Field Study	2.00	.910	2.21	.940	10002.000	.040
Creative Expression Activities	2.38	1.115	2.08	.983	9801.000	.022

The results of the Mann-Whitney Test show statistically significant differences in the degree of adoption of three of the experiential techniques, between the independent samples of men and women (Table 2). Specifically, it seems that women use the brainstorming technique more (average 3.28) than men (average 3.04), U=9911,500, p= ,026. Similarly, they use creative expression activities more often (average 2.38)

than men (average 2.08), $U=9801,000$, $p= ,022$. In contrast to the two aforementioned experiential techniques, the field research technique proves to be more often adopted by men (average 2.21) than women (average 2.00), $U=10002,000$, $p = ,040$.

Differences in regards to education

Studying the results of [Table 3](#) and observing the averages, it is found that the participants in the research adopt in their teaching the educational techniques of brainstorming and practical exercise, in contrast to the round table (debate). Depending on the educational level of the respondents, there are differences to the extent that they apply the brainstorming technique, $H(3)=23,509$, $p= ,000$, to the extent that they apply the practical exercise $H(3)=12,367$, $p= ,006$, but also to the extent that they apply the technique of the round table $H(3)=10,433$, $p= ,015$. From the post hoc analysis of multiple comparisons for the specific variables it was found that: a) in terms of the use of the brainstorm the differences are located between the independent samples Secondary - University / Institute of Technical Education ($p = ,001$), Secondary - Postgraduate ($p = ,000$), Secondary - Doctoral ($p= ,000$), b) in terms of the application of the practical exercise the differences appear between Doctoral - University / Institute of Technical Education ($p= ,044$), Doctoral - Postgraduate ($p= ,012$), Doctorate - Secondary ($p= ,001$), University / Institute of Technical Education - Secondary ($p = ,020$), Postgraduate - Secondary ($p= ,041$) and c) in terms of round table application the differences are between Secondary - Postgraduate ($p= ,033$), Secondary - University / Institute of Technical Education ($p= ,010$) and Secondary - Doctorate ($p= ,003$).

Table 3 Averages and standard deviations regarding the adopted educational techniques, in regards to the "Education" variable. Statistical significance test of the differences between the averages (Kruskal-Wallis Test)

EDUCATION	Secondary		University - Institute of Technical Education		Postgraduate		Doctorate		Statistical Significance Test		
	Avg	SD	Avg	SD	Avg	SD	Avg	SD	H	df	P
Which experiential techniques do you use in your teaching?	INDEXES										
Brainstorming	2.57	.69	3.12	.859	3.31	.772	3.30	.974	23,509	3	.000
Practice	3.43	.83	2.88	1.179	3.01	.927	2.52	.898	12,367	3	.006
Round Table - debate	1.50	.88	2.02	1.027	1.89	.977	2.26	.915	10,433	3	.015

Differences of dependent variables in relation to the job position

Looking at the averages in [Table 4](#), it is found that simulation and dramatization are not very popular experiential techniques in the teaching of adult educators. Nevertheless, checking the statistical significance of the differences in the averages

identifies significant differences in these two variables depending on the professional status of the respondents, $H(4) = 10,595$, $p = ,032$ and $H(3) = 10,952$, $p = ,027$ respectively. With the ex-post analysis of multiple comparisons, the differences in the use of the simulation technique are identified between the categories: Adult Educator Only – Federal Employee ($p = ,018$), Adult Educator Only - Private Employee ($p = ,011$), Freelancer – Federal Employee ($p = ,044$) and Freelancer - Private Employee ($p = ,027$). Respectively for the use of dramatization the differences are between the independent samples of Freelancer – Federal Employee ($p = ,003$) and Freelancer - Part-time worker ($p = ,022$).

Table 4 Averages and standard deviations regarding the adopted educational techniques, in regards to the "Occupation Status" variable. Statistical significance test of the differences between the averages (Kruskal-Wallis Test)

Occupational Status	Part time worker		Federal Employee		Private Employee		Freelancer		Adult Educator Only		Statistical Significance Test	
	Avg	SD	Avg	SD	Avg	SD	Avg	SD	Avg	SD	H	df p
INDEXES												
Which experiential techniques do you use in your teaching?												
Simulation	2.57	.978	2.70	.887	2.76	1.009	2.39	.94	2.36	.821	10,595	4 .032
Dramatization	2.10	1.09	2.01	1.050	1.81	.954	1.56	.90	1.71	.891	10,952	4 .027

Differences of dependent variables in relation to the type of educational structure. The statistical significance test of the differences between the averages (Kruskal-Wallis Test) showed that the participants, depending on the type of VTI where they work, adopt to a different degree in their teaching the experiential techniques of creative expression activities $H(2)=6,054$, $p = ,048$ and the mapping of concepts $H(2)=6,155$, $p = ,046$, (Table 5): In both kinds of VTI - Public VTI ($p = ,020$), while the differences in the use of the mapping of concepts are located between the independent samples Private VTI - Public VTI ($p = ,033$). In addition, observing the averages, it is found that the above techniques are generally not very popular among adult educators.

Table 5 Averages and standard deviations regarding the adopted educational techniques, in regards to the "Type of educational structure" variable. Statistical significance test of the differences between the averages (Kruskal-Wallis Test)

TYPE OF VTI	Public		Privayr		Public & Private		Statistical Significance Test		
	Avg	SD	Avg	SD	Avg	SD	H	df	p
INDEXES									
Which experiential techniques do you use in your teaching?									
Creative expression activities	2.36	1.064	2.10	1.11	2.02	1.0	6,054	2	.048
Mapping of concepts	2.32	.943	1.85	.933	2.14	1.0	6,155	2	.046

Differences of dependent variables in relation to the teaching experience

The experience in teaching in years seem to affect the quality and intensity of respondents' attitudes about the experiential techniques they choose (Table 6). The statistical significance test indicates differences between the independent samples in the use of the case study $H(4)= 10,260$, $p= ,036$, the project method $H(4)= 10,376$, $p= ,035$, the practical exercise $H(4)=10,655$, $p= ,031$ and mutual learning $H(4)= 10,257$, $p= ,036$.

Table 6 Averages and standard deviations regarding the adopted experiential techniques, in regards to the variable "Teaching experience". Statistical significance test of the differences between the averages (Kruskal-Wallis Test)

EXPERIENCE (IN YEARS)	0-2		3-5		6-8		8-10		>11		Statistical Significance Test		
	Avg	SD	Avg	SD	Avg	SD	Avg	SD	Avg	SD	H	df	p
INDEXES													
Which experiential techniques do you use in your teaching?													
Case study	2.88	.94	2.97	.71	3.09	.92	3.04	.70	3.2	.87	10,260	4	.036
The "Project" method	2.28	1.0	2.58	.91	2.59	.94	2.52	.99	2.7	.98	10,376	4	.035
Practice	2.78	1.0	3.11	1.0	2.91	.99	3.22	.85	3.2	.93	10,655	4	.031
Mutual learning	2.08	1.0	2.43	.99	2.41	.97	2.48	.59	2.4	1.0	10,257	4	.036

The post-hoc pairwise comparison showed that the differences in the use of the case study are located between the groups 0-2 & 11 and over ($p= ,003$) and 3-5 & 11 and over ($p= ,014$). The differences for the application of the project method are focused between the categories 0-2 & 11 and over ($p= ,002$). Regarding the practical exercise, differences are identified between the groups 0-2 & 3-5 ($p= ,027$) and 0-2 & 11 and over ($p= ,005$). Finally, the differences in the application of mutual learning are located between the independent samples 0-2 & 11 and over ($p= ,021$), 0-2 & 3-5 ($p= ,013$) and 0-2 & 8-10 ($p= ,047$) years of service.

Regarding the independent variables: (a) age of trainers and (b) geographical area where the educational structure of the teaching project is located, no statistically significant differences were identified regarding the adopted experiential teaching techniques.

4. CONCLUSIONS AND RECOMMENDATIONS

The purpose of this research effort was to examine what experiential teaching techniques adult educators adopt in their teaching. The individual and employment factors that influence their choice, but also the degree of their utilization in the learning process in the Institutes of Vocational Education (VTI) of our country were sought. The brainstorming technique is the most popular one, followed closely by practical exercise, case study and immediate experience activities, as they are educational techniques that promote the active participation of learners and enhance teamwork [Baumgartner \(2019\)](#). About half of the respondents are positive about the simulation and the project method techniques, in contrast to the other half who do not apply them in their teaching. The educational practices of mutual learning, creative expression activities and mapping of concepts come quite low in the preferences of the trainers. The educational approaches of the round table "debate" and dramatization are ranked last, as the largest percentage of respondents state that they do not integrate them in the teaching process. The differentiation in the preferences of the trainers, but also the intensity of the use of the different techniques, is interpreted on the basis that the application of experiential practices is influenced by a variety of factors [Bradford \(2019\)](#), [Pearson \(2019\)](#), but also due to the heterogeneity of conditions and characteristics of vocational education and training.

Based on the study of the differences that arose from the inductive analysis and are reflected in the above tables, some ascertainments can be concluded regarding the quality and intensity of the responses of the participants in the research. Specifically:

- Brainstorming and creative expression activities are two educational techniques that are preferred by women, while case study is more often adopted by male adult educators.
- Brainstorming is an experiential technique, which is more strongly adopted in the learning process as the educational level of the respondents rises. Conversely, the practical exercise is an experiential technique that is used more by respondents at a lower education level.
- The more years of teaching experience people have, the more positive they are towards the educational techniques of the project method and the practical exercises.
- Creative expression activities and concept mapping, although not very popular techniques, are mainly preferred by educators of public vocational training institutes.

The results indicate that experiential learning can be realized through "responding" to the different needs of adult learners. The selection of appropriate experiential techniques and their effective integration into teaching is influenced by a variety of factors, related to both human resources - trainers, trainees, administration - as well as organizational/operational factors of operation of Vocational Training Institutes. Regarding the human resources, important elements are the individual characteristics and the professional experience of the adult educators, while regarding the organizational/operational factors, the type of the educational structure.

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