

Experiential - Participatory Teaching Techniques in Primary Education: Exploring the Views of Greek Teachers

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Abstract

This research seeks to explore the views of Greek teachers in primary schools on the use of experiential - participatory teaching techniques in the classroom. More specifically, it seeks to investigate whether the use of experiential - participatory techniques will: improve the quality of teaching; make appropriate use of modern learning principles in the context of the functioning of the educational group; and make appropriate use of the specific characteristics, educational needs and interests of students. The research sample consisted of two hundred and ten Greek teachers. A structured questionnaire was used to conduct the research and collect data. The main findings of this research are coded as follows: (a) A very high percentage of teachers state that the quality of teaching is improved by using experiential - participatory teaching techniques, (b) A very high percentage of teachers state that by using experiential - participatory teaching techniques, modern learning principles are appropriately utilized in the context of the educational team functioning, (c) A fairly high percentage of teachers state that the use of experiential - participatory teaching techniques exploits the specific characteristics, educational needs and interests of students.

Keywords: participatory teaching techniques, Primary Education, views, Greek teachers

1. Introduction

By way of introduction, Didactics, apart from the fact that it supports the set of rules and principles that guide teaching theory, it functions as an applied science, utilizing teaching theories and intervening in the educational process through models, techniques and methods that contribute to the learning and teaching process (Dimitriadou, 2016; Fykaris et al., 2021; Koutrouba, 2004). The teaching and learning process has several characteristics that contribute to the formation of its structures and functions. More specifically, these are related

both to the concepts being taught and to the teaching objectives and teaching techniques for teaching these concepts (Hackathorn, 2011; Lygda et al., 2021; Piedade, 2019; Wang, 2020). In this context, several teaching techniques, in addition to teaching methods and models, play a crucial role in the realization of teaching objectives during instruction (Pedro et al., 2019). Teaching techniques are one of the ways of implementing a specific path of steps of teaching practices that need to be followed in the educational process for presenting teaching materials, structuring teaching activities and achieving intended learning objectives and outcomes (Jarvis, 2004, 2014; Lygda et al., 2021; Noyé & Piveteau, 1999).

Teaching techniques are usually classified into two categories (Evangelou, 2023a; Jarvis, 2004, 2014; Lygda et al., 2021) experiential/active - participatory and non-experiential/active - participatory. These two categories are differentiated based on the degree of active interaction between learners, teachers and educational materials. Typically, if the degree of interaction is low, then we refer to non-experiential/active - participatory where the teacher is the focus of the educational process. These include introduction, directed or controlled discussion, demonstration, in the case where they are controlled and directed, to a large extent, by the teacher in terms of the freedom to articulate students' experiences, interests and opinions (Lygda et al., 2021).

On the contrary, if the degree of interaction is high, then we refer to experiential/active - participatory teaching techniques where the student is the focus of the teaching and learning process. Experiential - participatory teaching techniques are utilized by the teacher in order to actively engage students in the learning process and achieve a high degree of pedagogical interaction (Lygda et al., 2021; Takele, 2020). These include brainstorming, concept maps (concept mapping), group work, role play, problem solving, simulation, case study, interviewing an expert, etc. (Cimer, 2007; Evangelou, 2023a; Hackathorn et al., 2011; Lygda et al., 2021; Noyé & Piveteau, 1999; Wolff et al., 2015; Zayapragassarazan & Kumar, 2012).

From the literature review, it is found in numerous researches and studies that experiential - participatory teaching techniques, when utilized during the learning and teaching process, arouse the interest of students and achieve their active participation in the learning process (Chugai et al., 2017; Hackathorn et al., 2011; Koutsoukos et al., 2021; Lygda et al., 2021; Martella et al., 2020; Wolff et al., 2015; Zayapragassarazan & Kumar, 2012) taking into account students' needs and interests (Barta et al., 2022; Evangelou, 2023a; Linsenmeyer, 2021; Lombardi et al., 2021; Vosniadou et al., 2020; Yennita & Zukmadini, 2021), enhance student learning, contribute to high learning outcomes (Armbruster et al., 2009; Barta et al., 2022; Evangelou, 2023a; Hyun et al., 2017; Johnson et al., 2014; Johnson & Johnson, 2017; Linsenmeyer, 2021; Mantra et al., 2022; Mantra & Handayani, 2022; Rissanen, 2014; Sakata, 2022; Slavin, 1985, 2015; Surakarn et al., 2020; Termos, 2013), as well as improve social relationships among work group members in the classroom through interaction and collaboration among students (Courau, 2000; Evangelou, 2023a; Kaldi et al., 2009a, 2009b; Kaldi et al. 2011; Kaldi, 2014; Louizou et al., 2019; Surakarn et al., 2020).

At the same time, one cannot claim that the use of teaching techniques ensures the success and effectiveness of the teaching and learning process from the outset (Evangelou, 2023a;

Ioannou & Athanasoula - Reppa, 2008). A crucial point for effective teaching is that the teacher must select appropriate teaching techniques during the instructional planning phase (Evangelou, 2023a; Nima & Kapsalis, 2002; Peko & Varga, 2014), together with the fact that for their selection they should take into account the students' cognitive level, the students' needs and interests, their learning profile, the teaching objectives, and the teaching tools (Evangelou, 2023a; Petruța, 2013; Kokkos, 1999). In other words, the effectiveness of a teaching technique in the learning and teaching process varies depending on the teaching situation and the way it is used by the teacher (Lygda et al, 2021).

In conjunction with the above, this paper seeks to explore the views of Greek teachers on the implementation of experiential - participatory teaching techniques in the classroom.

2. Method

2.1 The Aim of Research

This research aims to investigate the views of Greek teachers on the implementation of experiential - participatory teaching techniques in primary schools in the Region of Epirus (Greece).

2.2 Research Questions

The main research question of this study is the following: “Do experiential - participatory teaching techniques improve teaching and learning in primary education?”

The sub-research questions are the following six:

Research question (1): when teaching do you use the teacher - centered teaching techniques such as lecture, demonstration, narration, etc.?

Research question (2): in your teaching do you use experiential - participatory teaching techniques, such as concept mapping, brainstorming, role – playing, etc.?

Research question (3): by using experiential - participatory teaching techniques, will the quality of your teaching improve?

Research question (4): by using experiential - participatory teaching techniques, are modern learning principles appropriately exploited in the context of the functioning of the teaching team?

Research question (5): does the use of experiential - participatory teaching techniques make appropriate use of the specific characteristics of your students?

Research question (6): does the use of experiential - participatory teaching techniques best meet the educational needs and interests of your students?

2.3 The Population and Sample Selection

The research was conducted between 10 December 2022 and 20 January. The target population of this research includes all active teachers working in primary schools in the Region of Epirus (one of the thirteen administrative regions of Greece).

The list of Primary Schools of the Region of Epirus and the list of numerical data on serving teachers were used as a sampling frame. For the selection of the sample, the systematic sampling method was used, which is appropriate for large populations registered in catalogues (Argyropoulou, 2018; Cohen et al., 2000; Kyriazi, 2011; Tsiplitaris & Babalis, 2011). More specifically, 60 out of 183 primary schools were randomly selected. From the list of 60 Primary Schools and from the individual lists of teachers' data per Primary School, the final sample of this study was formed, consisting of 210 teachers. However, in order to form this sample, a total of 300 questionnaires were distributed, of which 210 were returned. The response rate is in the range of 70%.

2.4 The Questionnaire as a Research Tool

The questionnaire consists of closed-ended questions/ranking statements and was constructed on the Google Forms online platform. The main criteria for this choice were (Argyropoulou, 2018): (a) the need for clarity and ease of answering, (b) limited time required for the completion of the questionnaire (about 15 minutes) by the teachers in the sample and (c) anonymity, which limits the privacy concerns of the majority of teachers in terms of completing the questionnaires and the free and spontaneous expression of their views.

In this research, six of the thirty-six questions of the questionnaire are analysed. This is because these six questions exclusively explore teachers' opinions regarding the implementation of experiential - participatory teaching techniques in the classroom. The other thirty questions explore issues related to other teaching practices, such as differentiated instruction, cooperative group teaching, etc.

In the closed-ended propositions/statements, the subjects of the research are asked to indicate the degree of acceptance or rejection for a set of opinions, perceptions, etc. (Argyropoulou, 2018). In this context, the five-point Likert-type scale (from 1 to 5) was chosen as one of the most prevalent in the social sciences (Argyropoulou, 2018; Robson & McCartan, 2015). Based on this scale, depending on the content of the proposition/statement, the following five judgments/responses are included in the graded responses:

- (i) "Not at all" which is equivalent to the code/number (1)
- (ii) 'Slightly' which is equivalent to code/number (2)
- (iii) 'Moderately' which is equivalent to code/number (3)
- (iv) 'Very' which is equivalent to code/number (4)
- (v) 'Extremely' which is equivalent to code/number (5)

2.5 The Data Collection Process

The data collection process included the completion of an anonymous questionnaire and was carried out as follows: after the selection of the sample schools, a telephone call was made to the Director of the Primary Schools, in order to obtain permission to send the questionnaires to the teachers of the schools. Following this, the questionnaires were sent by the researcher to the email addresses of the sample teachers, with an enclosed letter containing information about

the purpose of the survey, the anonymity of the questionnaire and the short time to complete the questionnaire. At the same time, in order to enhance the completion of as many questionnaires as possible, the researcher took the following actions: a) personally telephoned each teacher in the sample in order to explain in more detail the purpose of the survey , b) after about fifteen days had passed since the questionnaire was sent, he telephoned a second time the teachers who had not completed the questionnaire.

The statistical analysis, processing and interpretation of the empirical data was implemented by using the SPSS 28 statistical package.

2.6 Reliability Check with Cronbach's Alpha Index

Using the SPSS 28 statistical package, a reliability test was performed using Cronbach's Alpha for the questionnaire. For the whole scale, the Cronbach's Alpha factor is $0.838 > 0.7$ (Tables 1 and 2) and is considered satisfactory for the reliability of the research instrument (Argyropoulou, 2018; Burns & Grove, 2001; Evangelou, 2023b ; Evangelou & Fykaris, 2023).

Table 1. Case Processing Summary

		N	%
Cases	Valid	206	98,1
	Excluded ^a	4	1,9
	Total	210	100,0

Listwise deletion based on all variables in the procedure.

Table 2. Reliability Statistics

Cronbach's Alpha	N of Items
,838	36

2.7 Limitations of the Research

A major limitation of the survey is the number of the sample, which consists of a total of 210 teachers, who do not constitute 10% of all active teachers in primary education throughout the country. Consequently, the results are not generalizable to all teachers teaching in primary schools in Greece.

3. Results

3.1 The Frequencies and Responses of Teachers' Statements to Six Variable Questions

The following six tables (3 to 8) analyse and describe the statements of the respondents in this research.

Table 3. Frequencies and percentages from the statements in variable - question (1)

Question (1)	N	Perc. (%)
Slightly	31	14,8
Moderately	100	47,6
Very	68	32,4
Extremely	11	5,2
Total	210	100

The first variable question is: 'To what extent do you consider that in your teaching you use the teacher - centred forms - teaching techniques, such as teacher's recommendation, demonstration, etc.?'. From the sample of two hundred and ten teachers, the statements are as follows (Table 3): 31 (14.8%) stated 'Slightly', 100 (47.6%) stated 'Moderately', 68 (32.4%) stated 'Very' and 11 (5.2%) stated 'Extremely'. From this data, it can be seen that a fairly high percentage of statements (80%) fall between the "Moderately" and "Very" options.

Table 4. Frequencies and percentages from the statements in variable - question (2)

Question (2)	N	Perc. (%)
Slightly	11	5,2
Moderately	95	45,2
Very	93	44,3
Extremely	11	5,2
Total	210	100

The second variable question is the following: 'To what extent do you consider that in your teaching you use the experiential - participatory teaching techniques, such as brainstorming, conceptual mapping, role-playing, problem solving, etc.?'. From the sample of two hundred and ten teachers, the statements are as follows (Table 4): 11 (5.2%) stated 'Slightly', 95 (45.2%) stated 'Moderately', 93 (44.3%) stated 'Very' and 11 (5.2%) stated 'Extremely'. From this data, it can be seen that a very high percentage of statements (89.5%) were found between the options "Moderately" and "Very".

Table 5. Frequencies and percentages from the statements in variable - question (3)

Question (3)	N	Perc. (%)
Not at all	1	0,5
Slightly	5	2,4
Moderately	41	19,5
Very	134	63,8
Extremely	29	13,8
Total	210	100

The third variable question is the following: 'To what extent do you think that through the use of experiential - participatory teaching techniques, will the quality of your teaching improve?'. From the sample of two hundred and ten teachers (Table 5), the statements are as follows: one (0.5%) stated 'Not at all', 5 (2.4%) stated 'Slightly', 41 (19.5%) stated 'Moderately', 134 (63.8%) stated 'Very' and 29 (13.8%) stated 'Extremely'. From this data, it is clear that a very high percentage of statements (83.3%) fall between the options "Moderately" and "Very".

Table 6. Frequencies and percentages from the statements in variable - question (4)

Question (4)	N	Perc. (%)
Not at all	1	0,5
Slightly	8	3,8
Moderately	58	27,9
Very	117	56,3
Extremely	24	11,5
Total	210	100

The fourth variable question is the following: 'To what extent do you think that the use of experiential - participatory teaching techniques will make appropriate use of modern learning principles in the context of the educational group? '. From the sample of two hundred and ten teachers, the statements are as follows (Table 6): 1 (0.5%) stated 'Not at all', 8 (3.8%) stated 'Slightly', 58 (27.9%) stated 'Moderately', 117 (56.3%) stated 'Very' and 24 (11.5%) stated 'Extremely'. From this data, it can be seen that a very high percentage of statements (84.2%) fall between the options "Moderately" and "Very ".

Table 7. Frequencies and percentages from the statements in variable - question (5)

Question (5)	N	Perc. (%)
Slightly	4	1,9
Moderately	50	23,8
Very	122	58,1
Extremely	34	16,2
Total	210	100

The fifth variable question is the following: 'To what extent do you think that the use of experiential - participatory teaching techniques will make appropriate use of the specific characteristics of your students?'. From the sample of two hundred and ten teachers, the statements are as follows (Table 7): 4 (1.9%) stated 'Slightly', 50 (23.8%) stated 'Moderately', 122 (58.1%) stated 'Very' and 34 (16.2%) stated 'Extremely'. From this data, it can be seen that a very high percentage of statements (81.9%) fall between the options "Moderately" and "Very".

Table 8. Frequencies and percentages from the statements in variable - question (6)

Question (6)	N	Perc. (%)
Slightly	4	1,9
Moderately	54	25,8
Very	122	58,4
Extremely	29	13,9
Total	210	100

The sixth variable question is: 'To what extent do you believe that the use of experiential - participatory techniques will best meet the educational needs and interests of your students?' From the sample of two hundred and ten teachers, the statements are as follows (Table 8): 4 (1.9%) stated 'Slightly', 54 (25.8%) stated 'Moderately', 122 (58.4%) stated 'Very' and 29 (13.9%) stated 'Extremely'. From this data, it can be seen that a very high percentage of statements (80%) fall between the options "Moderately" and "Very".

3.2 Means and Standard Deviation of Variables

The following table (Table 9) analyses the means and standard deviation of the variables.

Table 9. Summary analysis of Means and Standard Deviation of the six variables - questions

Question variables	N	Minimum	Maximum	Mean	Std. Deviation
Question (1)	210	1,00	5,00	3,28	0,778
Question (2)	210	1,00	5,00	3,50	0,679
Question (3)	210	1,00	5,00	3,88	0,678
Question (4)	210	1,00	5,00	3,75	0,727
Question (5)	210	1,00	5,00	3,89	0,682
Question (6)	210	1,00	5,00	3,84	0,671

Table (9) shows that in the 1st question - variable the Mean is 3.28 (Standard Deviation 0.778). This means that the responses are located well above 3 which is equivalent to "Moderately". Therefore, the teachers' statements are positive, which means that during teaching they utilize - in a fairly high percentage - the teacher-centered teaching techniques such as introduction, demonstration, narration, etc.

Table (9) shows that Mean in the 2nd question-variable is 3.50 (Standard Deviation 0.679). This means that the responses range between 3 which is equivalent to "Moderately" and 4 which is equivalent to "Very". Therefore, the teachers' statements are positive, which means that during teaching they use - in a fairly high percentage - the experiential - participatory teaching techniques such as brainstorming, conceptual mapping, role-playing, problem solving, etc.

Table (9) shows that the Mean in the 3rd question - variable is 3.88 (Standard Deviation 0.678). This means that the responses are very close to 4 which is equivalent to "Very". In other words, the teachers' statements are positive regarding the fact that by using the experiential - participatory teaching techniques the quality of teaching is improved.

Table (9) shows that the mean for the 4th question - variable is 3.75 (Standard Deviation 0.727). This means that the responses are very close to 4 which is equivalent to "Very" response. In other words, the teachers' statements are positive regarding the fact that by using experiential - participatory teaching techniques, modern learning principles are appropriately utilized in the context of educational team functioning.

Table (9) shows that the mean of the 5th question - variable is 3.89 (Standard Deviation 0.682). This means that the responses are very close to 4 which is equivalent to "Very". In other words, the teachers' statements are positive regarding the fact that by using experiential - participatory teaching techniques the particular characteristics of the students are appropriately utilized.

Table (9) shows that in the 6th question - variable the Mean is 3.84 (Standard Deviation 0.671). This means that the responses are very close to 4 which is equivalent to "Very". In other words, the teachers' statements are positive regarding the fact that by using experiential - participatory teaching techniques the educational needs and interests of the students are met in the best possible way.

4. Discussion

From the above results, it can be seen that the views of Greek teachers are positive regarding the implementation of experiential - participatory teaching techniques in the classroom.

In the first question there is a fairly high percentage (80%) ranging between the options "Moderately" and "Very" (Tables 3 and 9). This means that the research subjects' statements are positive about the fact that during teaching they use the teacher - centred teaching techniques, such as lecture, demonstration, narration, etc. At the same time, in the second question a very high percentage (89.5%) ranges between "Moderately" and "Very", (Tables 4 and 9). This means that the statements of the research subjects are positive regarding the fact that during their teaching they use the experiential - participatory teaching techniques, such as concept mapping, brainstorming, problem solving, etc.. From these results, it can be seen that teachers during the teaching process utilize a combination of teaching techniques, both teacher-centered teaching techniques and experiential - participatory teaching techniques (Lygda et al., 2021).

In the third question a very high percentage (83.3%) of the research subjects answered between the options "Moderately" and "Very" (Tables 5 and 9). This means that the respondents' statements are positive about the fact that the quality of teaching is improved by using experiential - participatory teaching techniques. The data in question (3) are identified in similar research where it is found that experiential - participatory teaching techniques enhance students' learning and achieve high learning outcomes (Barta et al., 2022; Linsenmeyer, 2021; Mantra et al., 2022; Mantra & Handayani, 2022; Sakata, 2022; Surakarn et al., 2020).

In the fourth question, a very high percentage (84.2%) of the research subjects answered between the options "Moderately" and "Very" (Tables 6 and 9). This means that the respondents' statements are positive as to the fact that the use of experiential-participatory teaching techniques appropriately utilizes modern learning principles in the context of the educational team functioning. The results of the fourth question are similar to the data obtained in several researches in which it is stated that when using experiential - participatory teaching techniques the social relations of the working group members in the classroom are improved through the interaction and cooperation between students (Courau, 2000; Evangelou, 2023a; Kaldi et al., 2009a, 2009b; Kaldi, 2014; Louizou et al., 2019; Surakarn et al., 2020).

In the fifth question, a fairly high percentage (81.9%) of the research subjects answered between the options "Moderately" and "Very" (Tables 7 and 9). This means that the respondents' statements are positive regarding the fact that students' specific characteristics

are appropriately exploited through the use of experiential - participatory teaching techniques. At the same time, in the sixth question a fairly high percentage (80%) of teachers answered between the options "Moderately" and "Very" (Tables 8 and 9). This means that the respondents' statements are positive regarding the fact that the educational needs and interests of students are met in the best possible way through the use of experiential - participatory teaching techniques. In line with the data of questions (5) and (6) in several researches and studies, it is demonstrated that the utilization of experiential - participatory teaching techniques achieve active participation in the learning process by taking into account the needs and interests of students (Barta et al., 2022; Evangelou, 2023a; Hackathorn et al., 2011; Martella et al., 2020; Linsenmeyer, 2021; Lombardi et al., 2021; Vosniadou et al., 2020; Wolff et al., 2015; Yennita & Zukmadini, 2021).

The above discussion demonstrates the importance of the use of experiential - participatory teaching techniques in Primary Education.

5. Conclusions

From the statements of the research respondents and from checking the research questions, the main conclusions that emerge are the following:

- (a) A fairly high percentage of teachers state that during the teaching process they use both teacher-centred and experiential - participatory teaching techniques
- (b) A very high percentage of teachers state that the use of experiential - participatory teaching techniques improves the quality of teaching
- (c) A very high percentage of teachers state that the use of experiential - participatory teaching techniques appropriately exploits modern learning principles in the context of the functioning of the educational group.
- (d) A fairly high percentage of teachers state that the use of experiential - participatory teaching techniques exploits the specific characteristics, educational needs and interests of students

In the context of the present research, it is worth noting that the teacher in the contemporary school is called upon to utilize teaching practices and techniques, such as experiential - participatory teaching techniques, which go beyond formalistic standards, prioritize the communicative nature of teaching and utilize flexible processes, focusing on the educational needs, learning readiness and multiple intelligences of students (Başaran, 2021; Dimitriadou, 2016; Ioannidi & Malafantis, 2022; Kalantzis & Cope, 2012; Malafantis, 2022; Peko & Varga, 2014). In other words, in this case, if the teacher utilizes participatory teaching techniques - such as brainstorming - the teacher will be able during teaching to meet the needs and interests of students, their learning profile, involving them in an active and experiential way in the teaching and learning process (Evangelou, 2023a; Barta et al., 2022; Grigoriadou et al., 2009; Linsenmeyer, 2021).

The preference for appropriate teaching techniques and their effectiveness depends primarily on the teacher and the way he/she perceives his/her role in the classroom, as well as on the

processing of the teaching content (Zagotas, 2020; Peko & Varga, 2014). More thoroughly, this decision on the choice of appropriate instructional techniques is made by the teacher in the context of instructional planning, in conjunction with the consideration of all other factors related to the student, the content and the teaching space (Zagotas, 2020). In this context, the teacher must have flexibility and the corresponding teaching and pedagogical skills (Kaldi & Xafakos, 2017; Poth, 2012; Trilianos, 2013; Tzifopoulos, 2021) in order to be able to use the appropriate teaching technique and even the appropriate experiential - participatory teaching technique, as well as combine it with other experiential - participatory teaching techniques or alternate them, so that students are as actively involved as possible in the learning and teaching process (Evangelou, 2023a; Ioannou & Athanasoula - Reppa, 2008; Evangelou, 2023a; Ioannou & Athanasoula - Reppa, 2008; Kokkos, 1999; Petruța, 2013).

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