

# The Application of Microteaching in Teachers' Education and Training

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## Abstract

Microteaching is an innovative educational method that began to be applied almost fifty years ago in teachers' education and training, with its application subsequently expanding to other professional environments. This paper focuses on the study of the role and application of microteaching and attempts to demonstrate its value and importance mainly concerning candidate and serving teachers' education and training. This article initially presents the definition, the object, the stages, and the scientific foundation of the method under discussion. Then, general information is provided for the application of microteaching both in Greece and internationally. Finally, the value of microteaching, its importance, and its contribution, especially in teacher education and training, are analyzed and discussed.

**Keywords:** Microteaching, teachers' education and training, practicum, teaching, teaching skills.

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## 1. INTRODUCTION

The purpose of this theoretical study is to present the educational method of microteaching and to demonstrate its magnitude and importance in terms of its application in teachers' education and training.

Microteaching is an educational innovation that has been applied for about half a century in the education and training of potential and active teachers, aiming to prepare them for the performance of their work through the exercise of specific behaviors and skills, as well as to improve their professional training, mainly in what is related to teaching methodology (its planning, conduct, and evaluation) (Kougiourouki, 2007, p. 455).

Microteaching appeared as a necessity initially in education and then in the training of candidate and serving teachers, on the one hand, because there were no ways in the respective programs to introduce and familiarize teachers to and with the reality of teaching, gaining experience and relevant skills, on the other hand, because the prospective and in-service teachers could not cope with the intricate and complex phenomenon of teaching entirely (Kougiourouki, 2003, pp. 15-16).

Thus, microteaching fulfills the necessary condition of gaining experience in a simulated laboratory environment before teachers learn and practice in real

classroom conditions, as happens in other professions (Vrettos, 2003, p. 174; Wilkinson, 1996, p. 212).

This article has been organized in the following way: After a literature review, microteaching is initially defined, its object is described, and the stages it goes through as well as its scientific foundation are briefly discussed. Then, some historical data on its application first internationally and then in Greece are presented. Finally, researchers' standpoints as well as research findings are presented and discussed that support and document respectively the value and importance of microteaching.

## 2. DEFINITION, OBJECT, STAGES, AND SCIENTIFIC FOUNDATION OF MICROTEACHING

Microteaching has been characterized variously as a "laboratory exercise of didactic and educational purpose, dimension and texture", "mini-lesson", "lesson miniature", "teaching and educational means, with which the trainee teacher discovers his/her shortcomings and defects in teaching as well as his/her pedagogical training, to surpass them", as "teaching technique", "educational laboratory process", "laboratory form of teaching", "useful teaching tool", "effective pedagogical tool", "effective research tool for teaching issues", "laboratory-style lesson", "appropriate method for

practicing teachers' behavior", "applied process and practice", "educational and teaching process", "teaching format", etc. (Chatzidimou D., 2003, pp. 15-26). As stated by the founders of this teacher practice method (Allen & Ryan, 1969, p. 1), it constitutes "a training concept that can be applied at various pre-service and in-service stages in the professional development of teachers".

Microteaching, which usually precedes student-teachers' practicum (Darmayenti, Besral, & Kustati, 2019, p. 23), is a real, but controlled and simplified - in terms of the number of learners, duration, and teaching content as well as the teaching skills required - teaching, for the student teachers to cultivate the necessary skills to teach effectively (Chatzidimou K., 2016, p. 138; Remesh, 2013, p. 158).

As far as its application is concerned, initially, the candidate or current teacher practicing with the microteaching method is informed and trained both in pedagogical and didactic matters in general, as well as in the specific teaching skills and pedagogical behaviors in which he/she practices in and by observing and commenting on previous microteaching. Then, he/she prepares a lesson plan, on which he/she bases the teaching. Next, initially focusing on one skill, activity, or pedagogical behavior and gradually progressing to more, he/she undertakes to teach a small audience made up of his/her fellow students or even real students (3-10 people), for 5-20' of an hour, a small teaching unit, in a properly configured and well-equipped laboratory [<sup>1</sup>]. The teaching of the student teacher is recorded using closed-circuit television and at the end, it is shown again, so that it can be discussed, studied, and criticized by the teacher himself/herself, by his/her fellow students, but also by the teacher who is responsible for the microteaching (supervisor, mentor, advisor) (Chatzidimou D., 2021, pp. 13-37; Cooper & Allen, 1970, p. 1; Kougiourouki, 2003, pp. 14-15; Mukuka & Alex, 2024, p. 2). The criticism that is made focuses on the practiced pedagogical behaviors and skills, on effective and ineffective handling, while alternative suggestions for improvement are formulated. Then, either on another day or on the same day, the student-teacher carries out another teaching, to avoid the mistakes of the previous teaching and incorporate in the

new one the observations made in the criticism stage (Kougiourouki, 2007, p. 456) [<sup>2</sup>].

The objectives of microteaching are, in addition to the acquisition, improvement, and refinement of the teaching and technical skills of practicing teachers, which contribute to the improvement of their teaching ability, the combination of traditional teaching means with new technology as well as the combination of theory and practice, which contribute to teacher effectiveness (Kougiourouki, 2003, pp. 15-16).

Finally, the scientific foundation and evolutionary course of microteaching is directly intertwined and inextricably linked a) with the theory of behaviorism, which developed and prevailed in the field of Psychology and more generally in school education in the 60s, and in general with the various psychological theories of learning that prevailed and prevail every time and that result in the various teaching models that were developed, b) with the various stages through which pedagogical research in the field of the Pedagogical Science has passed until today, and more specifically the research in the scientific branches of Didactic Research and School Pedagogy, and especially with the research prepared in this context and related to the analysis of interpersonal relationships and communication between teacher and student, c) with the development of educational technology, especially in terms of its effect on the methodology and the way microteaching is carried out. The scientific foundation of microteaching is also documented by the findings of empirical research conducted both in our country (Greece) and internationally which demonstrate its effectiveness, as well as the scientific international conferences that are held, in which the importance, role, and value of microteaching in teachers' training and education and wherever else it is applied are corroborated (Chatzidimou D., 2021, pp. 22-27).

### 3. GENERAL INFORMATION ABOUT THE APPLICATION OF MICROTEACHING

The first appearance of microteaching was in 1963 at Stanford University thanks to Allen and Ryan, who also developed its first model, to improve and make teacher training more effective through the coupling of

<sup>1</sup> The audience in which microteaching takes place consisted of 3-10 people during its initial application. Now, this audience consists of more people (Chatzidimou D., 2021, p. 13). In any case, however, the number of the audience as well as the duration of microteaching vary depending on the applied model (O' Flaherty, Lenihan, Young, & McCormack, 2024, pp. 3-4).

<sup>2</sup> From the utilization and application of microteaching, various models emerged, which show more or less differences from the original Stanford model (see Chatzidimou D., 2021, pp. 31-39; Kougiourouki, 2003,

pp. 41-53). However, the second teaching, as described above, in the context of microteaching is not applied in the practical implementation in our country, with the reasons attributed to the large number of students who practice this method (Chatzidimou D., 2021, pp. 37-38). After all, various factors may be responsible for the implementation of a specific microteaching model, and therefore there can be many variations regarding, for example, the type and number of the audience, the kind and amount of supervision, lesson length etc. (Cooper & Allen, 1970, p. 1).

theory and praxis (Chatzidimou D., ch.ch., p. 1). Since then, microteaching has experienced rapid growth in European countries, in the USA, but also in developing countries (Klinzing & Floden, 1991, p. 4), and has been a part of teacher training programs worldwide (O'Flaherty *et al.*, 2024, p. 3).

Since the 90s, however, there has been a decline in its application in teacher education, while some doubts have been expressed about its theoretical basis, value, and contribution, which is attributed to the evolution of education trends in the philosophical and theoretical background (Ralph, 2014, p. 18). However, despite any doubts, it continues to be used to this day not only in education but also in training and assessment, and especially in the self-assessment of teachers (Chatzidimou D., ch.ch., p. 1). Microteaching is also applied internationally in the professional development of potential and active professionals in other sciences and scientific disciplines, such as medicine, nursing, geriatric care, athletics/sports training, nutritional counseling, pharmacy, psychological counseling, dentistry, etc., where professionals practice, improve, and reflect on either teaching skills or other skills (e.g. communication, emotional intelligence, interpersonal, interviewing, presentation, etc.) and knowledge related to their profession, receiving feedback on their performance (Mukuka & Alex, 2024, p. 2; Ralph, 2014, pp. 17-19).

On the other hand, the first application of microteaching in teacher training in Greece was found in 1973 at the former School of Educational Officers of Vocational and Technological Education (SELETE), now the School of Pedagogical and Technological Education (ASPAITE), while its application continuing without interruption until today in this School, in the context of practicum during the preparation of teacher candidates, who mainly staff Technical-Vocational Education (Chatzidimou, K., 2011, n.p.). In the years that followed, and especially after the establishment of the Departments of Preschool and Primary Education, microteaching was included in the Curricula more of the University Departments that prepare and train Primary School teachers and much less of the University Departments that prepare and train School teachers of Secondary Education teachers Education. However, microteaching was included for the first time in the curriculum of a university Department in Greece, specifically in the Department of Primary Education of the Aristotle University of Thessaloniki, in the academic year 1987-1988 due to Prof. Dr. D. Chatzidimou, who applied the same model from 1994 onwards in the Sector of Pedagogy of the former Department of Philosophy, Psychology and Pedagogy of the Aristotle University of Thessaloniki, now the Department of Philosophy and Pedagogy (Kougiourouki, 2003, pp. 27-34) [3].

<sup>3</sup>Almost the same model is applied continuously to this day in the Department of Primary Education of the Democritus University of Thrace since 1992, when

Regarding the application of microteaching in teachers' training in Greece, it has been mentioned that the Training Schools that provided it are the former SELETE – now ASPAITE and some Regional Training Centers (PEK) in the country. Furthermore, in the Major Training Program, in which 6.000 teachers from primary and secondary education participated, the conduct of microteaching lasting 15 minutes without video recording and evaluation followed the theoretical training received by the participating teachers (Archonti, 2015, pp. 64-65, 70; Balita, 2015), while also in the Department of Primary Education of the Democritus University of Thrace it has been used in teachers' retraining, with positive results in the latter case, as reflected in various research findings (Kougiourouki, 2003, pp. 37-40). Moreover, in recent years, with the establishment of Lifelong Learning Centers in Greek universities, educational seminars provided by them on the field of Adult Education also include microteaching (e.g. KE.DI.VI.M., Panepistimio Kritis, ch.ch.).

However, microteaching seems to be widely used in the field of Adult Education in Greece. Thus, it is an integral element, for example, in the postgraduate education of students attending the postgraduate study program of the Hellenic Open University (E.A.P.) entitled "Adult Education" (Odigos Spoudon SAE, 2023-2024, p. 101). Microteaching is also a necessary procedure, after taking part in a written examination, for one who wants to obtain the Certificate of Educational Proficiency for Adult Teachers of Non-Formal Education, which is provided by the National Organization for the Certification of Qualification and Vocational Guidance (E.O.PP.E.P.) (Y.A. GP/20082/23-10-2012, F.E.K. V' 2844). It is therefore concluded that the utilization of microteaching in adult education also serves the evaluation of trainee teachers, except for their practice in teaching (Chatzidimou K., 2016, p. 139).

#### 4. THE IMPORTANCE AND BENEFITS OF MICROTEACHING

As previously mentioned, a key feature of microteaching is the simplification of the complex and involute structure of teaching (Chatzidimou K., 2016, p. 138). In this way, learners focus on practicing, improving, and acquiring specific teaching skills (e.g. questions that do not allow for a specific answer, using appropriate examples, asking clarifying questions, etc.), thus being able to manage and better control their first contact with the teaching practice. Therefore, and during its application, the risk of causing negative consequences and effects on real students from any mistakes of the inexperienced practicing teacher during the teaching process is also avoided, since microteaching is applied in

microteaching was introduced in this Department by Prof. Dr. El. Taratori (Mouratidis, 2010, p. 34).

a simulation environment and the recipients of the teaching work are usually fellow students and classmates of the trained teacher and not real students (Chatzidimou D., 2003, p. 22). In addition, the simplified simulation environment, in which microteaching takes place, benefits the student teacher to face and overcome the first shock he/she experiences from praxis and to reduce the anxiety and stress he/she experiences during the first teaching (Kougiourouki, 2007, p. 455).

Microteaching in the context of pre-service teachers' practicum and serving teachers' training contributes to their teaching and pedagogical training and preparation, arming them with the necessary equipment and increasing their self-confidence, to help them carry out the difficult and demanding teaching work and in general their educational work, given that teaching is a pedagogical phenomenon that is multifaceted and complex (Chatzidimou D., 2003, pp. 19, 22).

The pedagogical and teaching training and arming of teachers with microteaching occurs since microteaching helps the trainees to know and change their behavior during teaching, to come directly into contact with the various teaching strategies, to analyze the many aspects of school teaching, to learn ways to identify and overcome specific problems and situations of a didactic and pedagogical nature, as well as to learn to overcome their teaching and pedagogical imperfections, weaknesses and deficiencies, which appear at the beginning of their professional career (Chatzidimou D., 2021, pp. 13-15).

All of the above are achieved by trainee teachers in microteaching through the controlled and simplified teaching framework that it ensures them, with the guidance, recommendations, and instructions provided by the Professor who is responsible for conducting it and has undertaken to advise trainee teachers after watching the videotaped teaching, as well as both through the self-evaluation, self-criticism, and self-analysis of the trainee teacher who saw the videotaped material, and with the criticism and commentary made by the audience participating in the conduct of microteaching (Kougiourouki, 2003, pp. 17-20), and, finally, by comparing microteaching with other models that have been presented (Chatzidimou K., 2016, p. 139). The benefits and positive contribution of microteaching to various aspects of teacher education and teacher training supported at a theoretical level and according to its basic characteristics and principles are confirmed by research that has been conducted from time to time both internationally and in Greece.

Regarding the research findings from the Greek-language literature, some are for example the following: Pre-service teachers after their practice with microteaching claimed that this method contributes to acquiring teaching skills, but also generally contributes

to their teaching and pedagogical training, while they find that it constitutes an interesting educational process and a necessary teaching tool (Kougiourouki, 2003, p. 129). They also claimed that microteaching helped them to overcome the stress and anxiety that teachers experience at the beginning of their career, to feel confident in teaching, to learn to evaluate the results of teaching, to learn to practice around the appropriate way of teaching, but also not to fall into mistakes made by their fellow students in teaching (Chatzidimou D., 2021, pp. 145-146). In another research, pre-service teachers who applied microteaching identified its benefits in lesson planning, in the use of educational equipment, in the clear formulation and selection of appropriate teaching objectives for each unit they teach, etc. On the contrary, the prospective teachers stated that microteaching did not help them, for example, in classroom management as well as in the improvement of their cognitive background (Mouratidis, 2010, pp. 113-114). Research findings also demonstrate that after the practice of microteaching, pre-service teachers found it necessary to apply student-centered teaching methods and techniques as well as they concluded the importance of key factors of teaching effectiveness. Furthermore, the same research found that microteaching contributed to the trainees moving into the type of critical reflective teacher, etc., while its findings also confirm the benefits arising from the advantage of the controlled and safe context of microteaching, which consist in dealing with the first shock of praxis and the non-impact of mistakes on real students (Chatzidimou K., 2016, pp. 145-147). In addition, in a study carried out, regarding the opinions of those who teach microteaching in Greek University Departments that train teachers around various issues related to it, it was shown that supervisors-Professors themselves identify the benefits of microteaching in students' practice and development of their teaching skills as well as they emphasize its contribution to the formation of characteristics of the reflective teacher professional (Fykaris & Papaspyrou, 2014, pp. 118-128).

On the other hand, in the international literature, it is found, for example, that pre-service teachers who carried out microteaching have a positive attitude towards it, stating that it helped them to gain self-confidence and experience, to reduce their fear of the profession, to develop their professional skills, and especially the skills of presentation, problem-solving, and communication (Hamidi & Kinay, 2021, pp. 234-235). Several international studies carried out in different periods confirm the positive contribution of microteaching to teaching readiness and effectiveness, mastering new teaching techniques, increasing motivation and self-confidence, and reflective practice, as well as to teachers' professionalism (O' Flaherty *et al.*, 2024, pp. 3-4). Indicative research findings on the application of microteaching in other professional environments also demonstrated that microteaching improved the communication skills of doctors, mainly in terms of communicating unpleasant information and

news to patients, while medical students cultivated their teaching skills and developed in the processes of self-regulation and autonomous learning (Ralph, 2014, pp. 18-19).

## 5. CONCLUSION

Microteaching cannot independently support the full preparation of teacher candidates (Darmayenti *et al.*, 2019, p. 24), displaying a series of limitations (Chatzidimou K., 2016, p. 147), as of course, happens with all educational techniques and methods. This, however, in no way diminishes its value as an innovative educational method, which has been integrated into the context of practical training and managed to establish itself for almost fifty years in the education and training of pre-service and in-service teachers in many countries internationally, while it has been widely used and for the education and preparation of professionals in many other professional fields (Allen & Cooper, 1972, pp. 6-10; Ralph, 2014, pp. 18-19), offering various benefits, such as the pedagogical and teaching training of teachers.

In fact, and given the direct interrelation of the evolution of microteaching with new technologies, the application of this educational method to e-learning and virtual classrooms is proposed (see Epitropou, Theodosiou, Chatzopoulou, Kakana, & Vassiliadis, 2010), while it has also been proposed its utilization by teachers in higher education (Chatzidimou K., 2016, p. 147).

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