

THE EFFECT OF MICROTEACHING TECHNIQUE ON TEACHING SKILLS
DEVELOPMENT OF PRE-SERVICE TEACHERS OF FOREIGN LANGUAGES THROUGH
THE ONLINE COURSE

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RESEARCH PLAN

PhD PROGRAMME EDUCATION IN THE KNOWLEDGE SOCIETY
UNIVERSITY OF SALAMANCA

JUNE 2022

INTRODUCTION

Microteaching presents opportunities of immeasurable worth for teachers to conceive and apply the ideas and ways of efficient learning strategies that play an important part in career evolving and teaching skills development. This technique may be seen as an extract of professional teaching as it includes regular production of elaborate lesson plans which may also serve as a step-by-step guide for lesson execution. Moreover, the effectiveness of teaching process increases due to meaningful feedback provided by lectures and peers. As the teacher's aim is to deliver a clear and effective learning, the teacher must use the ways of teaching that engage students in different activities for learning process of high quality (Killen, 2006; Adhikari 2020).

The original technique of microteaching as teacher training was developed by D.W. Allen and his coworkers at Stanford University and was closely connected to psychological theory of behaviourism. However, the similarity between microteaching and Skinnerian concept of operant condition were reported much earlier by Bartley (1969). Supporting this idea, it is also claimed that microteaching helps pre-service teachers to plan lessons of a good quality. These lesson plans can be used during the practicums in schools, more than that, the feedback from students gives trainee teachers an opportunity to improve and master their skills. So, microteaching is a way to support teachers, to fix the teaching strategies, develop basic skills and keep the process of teacher-training productive as it implements real teaching situations into the process and deepens the knowledge (Ghanaguru, et al., 2017; Zhou 2017).

Studying the disciplines of subject training initially is designed to ensure the formation of the knowledge foundation of future teachers, the development of their practical skills in the subject area. In this case, the educational process, as a rule, is aimed only at the qualitative development of the content of subject disciplines and is weakly associated with the formation of pedagogical skills and abilities of future professional activity students.

Microteaching is an exceptional opportunity for trainee teachers to use theoretical knowledge in real teaching situations and to develop their skills and self-assurance. Research has shown that microteaching is proved to be one of the most effective ways of teacher training in which different teaching skills are practised under carefully controlled conditions. These all forms an idea of microteaching to be one of the most fruitful methods to prepare highly qualified teachers to deal with teaching process. More than that, microteaching gives an inexperienced teacher an opportunity to identify their weaknesses and strengths, improve planning and time management skills, class control and physical engagement during the process of teaching (Mergler & Tangen, 2010; Saban & Çoklar, 2013).

Similarly, Wallace (2010) highlights that microteaching is a system of simplified teaching situations, which positively affects the teacher training process. All in all, microteaching is seen as one of the most productive ways of teacher-training as it is easily implemented and reliable technique which gives more opportunities to control and analyse the progress of future teachers of foreign languages: firstly, students gain knowledge and experience for future teaching process. Secondly, those teachers who teach the students have an opportunity to personally see how effective microteaching is.

Modern society experiences rapid and profound changes due to the development of IT sphere. Successes in the informatization of society largely depends on how the training of all its members and, above all, foreign language teachers is carried out. That is why the professional readiness of future foreign language teachers for the upcoming pedagogical activity should meet the requirements of the time as much as possible (Oye & Iahad 2012). It is paramount to train teachers for real teaching process including all peculiarities of modern studying process. The wide use of e-learning does not mean replacing face-to-face classes but widens the horizons for education process. Distance learning is now seen as a part of blended learning (Gros & García-Peñalvo, 2016). This method, which is a congeries of various teaching tools, is often used to improve the teaching process and create additional motivation

while class work, while blended learning is one of the ways to organise process of studying, which includes class work with teacher's physical involvement and distance learning with the predominance of individual and group work (Mena and Flores, 2016; Sánchez-Gómez et al., 2020).

Massive Open Online Courses (MOOCs) — a new paradigm of distance learning that allows for the implementation of current pedagogical methodologies and the popularity of MOOCs today is growing rapidly. MOOCs' openness and new unique philosophy of massive make them an exceptional tool for lifelong learning (Beltrán Hernández de Galindo & Ramírez-Montoya, 2019; Khlaif et al., 2021). In addition, García-Peñalvo et al. in their study highlight the necessity "...to design specific technological frameworks for the MOOC context to take advantage of the massification, diversity, and multiculturalism they present; generate new pedagogical approaches; and use the new forms of learning..." (García-Peñalvo et al., 2018). Along with quantitative changes, there are also qualitative ones in terms of the content (the use of HD video, 3D worlds, virtual reality, or gamification elements) and the role of the teacher in the classroom (his\her professional functions and competencies).

Existing various modifications of MOOCs such as BOOC (big open online course), SOOC (selectively (selective) open online course), SPOC (small private online course), SMOC (synchronous massive online course), TORQUE (tiny, open-with-restrictions courses, focused on quality and effectiveness), and many others help to combine online and offline learning\teaching providing collaboration, interactive communication, accessibility, and flexibility (Baumann, 2016; ETH, 2014).

HYPOTHESIS AND PRINCIPAL OBJECTIVES SOUGHT

The communication in society, economy, social life, and technology has become an integral part of modern society through dynamic and boundless process of integration information and communication technologies which erases many borders and sets new trends (Kelly & McAnear, 2002). Consequently, new targets and goals are set both for teachers and students, and the process of teaching in higher educational institutions must meet the requirements of the time. Thus, usage of microteaching-based online courses to provide pre-service foreign language teachers with real teaching prior and practice is still a question of a great necessity (Zakharova, 2021).

The meaning of the thesis follows from the research question:

What actions should be performed to ameliorate the quality of training process of future teachers of foreign languages using micro-learning technology?

The purpose of the thesis:

Design a new model of microteaching as an effective methodological resource providing inexperienced teachers with much needed capability, and proficiency in teaching and learning context.

General objective:

Development of student's teaching abilities through open-with-restrictions courses, focused on quality and effectiveness (TORQUE) based on microteaching in teacher education.

Specific objectives:

To achieve this purpose, we have identified the following tasks:

1. To determine the principles and peculiarities of microteaching as a 'powerful' tool to study the teaching and learning frameworks of pedagogical future.

2. To explore the development of information technologies in terms of the effectiveness of the use of micro-learning technology in the educational process and opt for the most functional ones to evaluate professional competencies of inexperienced teachers of foreign languages.
3. To design the online course in the format of TORQUE in MOODLE based on the principles of microteaching techniques.
4. To implement\embody an experimental work on the online course, basing it on the idea of microteaching to provide the students with required skills.

Hypothesis

The study will consist of three stages, which are described in detail in the methodology section below. The hypotheses are stated for phase 3 (follow the description of the phases in the section Methodology)

— H1 (alternative hypothesis): There are statistically significant differences in students' academic performance between undergraduates using online learning courses in the format of TORQUE in MOODLE in trainee teachers' education and those who do not.

— H0 (null hypothesis): There are no statistically significant differences in students' academic performance between undergraduates using online learning courses in the format of TORQUE in MOODLE in trainee teachers' education and those who do not.

METHODOLOGY

The methodology to be used will be mixed, as well as the code of ethics and agreed ethical principles (BERA) for conducting educational research will be taken in consideration (BERA, 2018). The conducted study will use the theory and practice of microteaching, including qualitative and quantitative data, as a basis. The use of qualitative methods is seen as a necessity as, in education especially, it is the way to find the shared scope in science and practical teaching. Quantitative methods will be used for numerical measurements and statistics analysis to test hypotheses and to prove the theoretical thesis (Bryman, 2008; Coleman & Unrau, 2010).

The methodology of the work will be assorted. The research will be structured in three different phases, outlined as follows:

PHASE 1: Analysis of the content of microteaching learning, coaching, and reflection.

PHASE 2: Design and validation of an online course in the format of TORQUE in MOODLE based on the principles of microteaching in teacher training process.

PHASE 3: Use\Applying the online course based on the principles of microteaching in pre-service teacher education.

PHASE 1: ANALYSIS OF THE MICROTEACHING TECHNIQUES OF FUTURE TEACHER'S EDUCATION

An extensive theoretical analysis of modern research on the problem of microteaching, its key concepts and options for practical application for the professional development of pre-service teachers in order to form professional competencies will have been done in the period of 2021-2022. Besides, the theoretical assumptions of the main changes in the system of teacher education and the process of introducing digital technologies into the professional sphere of a teacher based on the literature review will have been conducted. Furthermore, according to Peñalvo who states that "...explicit, transparent, methodical, objective, standardised, structured, creative, understandable, publishable, stimulating and well written ..." systematic review along with systematic approaches and appropriate planning phases is the most effective and robust method of evidence-based research (García-Peñalvo, 2022).

Furthermore, this phase will present the prospects and capacity of online education, the types of online courses and strategies of online courses organisation with the mentioning of all crucial settings. Finally, Wide range of different ways for the educational process improvement will have been contemplated.

PHASE 2: DESIGN OF THE ONLINE COURSE IN THE FORMAT OF TORQUE IN MOODLE BASED ON THE PRINCIPLES OF MICROTEACHING IN FUTURE TEACHER TRAINING EDUCATION

Based on the results of Phase 1, the online course for future teachers, which would gradually evaluate teaching abilities of the learners, improve their communication skills, and help consciously reflect on their pedagogical skills with mutual learning, will be presented. In addition, the course will display the main principles of practice oriented professional teacher education of microteaching. Moreover, it might become a chance for undergraduates to evolve into a highly professional teacher by adjusting teaching strategies.

The process of designing an online course will be conducted from different perspectives. For the creation of the course, the platform learning management systems (LMSs) Moodle and Course Builder\ EdApp tools will have been extensively studied. It is also to mention that such features as flexibility, course building tools, and ease of use will be considered.

To present (LMSs) Moodle it must be said that is an online platform, which provides an educator with simple, concise and unified system for designing personally customized learning environments. On the whole, this platform gives the creator an opportunity to upload digital content and easily deliver it to learners, grade them and monitor their positive results (Al-Ajlan & Zedan, 2008; Kerimbayev et al., 2019). (LMSs) Moodle offers flexible interaction of participants in the educational process, the possibility of transparent assessment, reflection, and innovative online content (Olmos et al., 2015).

EdApp can be described as a mobile learning management system (LMS) created with the purpose of simplifying the process of interacting with students. Its main aim is to provide students with «microlessons». The benefit of this system reposes in the fact that students have an opportunity to use different devices to access the classes. It is also worth to mention that learners are also provided with the system-automized quiz Brain Boost to simplify the process of revision. For refreshing the knowledge students may also use a quiz creator Rapid. All in all, this binds microteaching with gamification, turning the studying into engaging process.

Course builder tool can be used to present course material, which includes lessons, student work, assessments, and instructions for using other Google products to build a course community and measure course performance. Thus, the Course Builder is a flexible and simple tool which assists in developing interactive presentations, training, and testing in the design process (McDade, 1992; Lyashenko & Frolova, 2014; Desire2Learn, 2019).

PHASE 3: APPLAYING THE ONLINE COURSE IN THE EDUCATIONAL PROCESS AND EXPERIMENTAL WORK

This phase will cover the topic of diagnostic tools creation. Under diagnostic tools we understand the experimental works, including tests, feedback forms of various formats, questionnaires and other useful methods. To apply the theoretical conclusions of the research the results of the studies will be presented and realized during the course of 'Teaching Methods and Learning Strategies of a Foreign language'. The course comprises of two parts - theoretical and practical. The theoretical part includes the overview of different practice systems and strategies a teacher uses in his or her professional scope and is mostly derived from the ideas of language nature and the process of learning it. The practical part of this course will be mostly connected to the object of the studies; the educational process will be divided into logical parts and determined by the results expected from the learning process related to student performance.

It should be mentioned that the course is obligatory as it is an important part of specialization set of disciplines and contribute to the formation of future teachers. The students would have regular professional practice as English teachers in the field of pedagogy, with modern knowledge of information technology and experience of on-line learning.

Taking into consideration that this course is obligatory as a crucial part of educational process for the future teachers and development of their professional competences. They would have professional practice-oriented classes as English teachers in the field of pedagogy, using all the knowledge and experience of on-line learning and B- learning. The target audience will include full-time Bachelor students of 3d and 4th year of Kazan Federal University.

Out of 120 students, 60 will be assigned to an experimental group and 60 to a control group. The experiment will be implemented during the 1st and the 2d semesters of the 2022-2023 and 2023-2024 academic year. All the students participating in the experiment will be informed about the research objectives and acknowledged the required information and permissions.

The experimental (focus) group would take microteaching based courses in the format of TORQUE in MOODLE in an online format and examine the influence of the course; would evaluate the understanding of the pre-service teachers in mastering their teaching abilities; would examine the effectiveness of microteaching in developing teaching proficiency among unexperienced teachers.

The control group will gain such teaching skills as lesson plan preparation, classroom management and motivation strategies in a traditional way, which includes theoretical material studying and verbal explanation by the teacher.

MATERIAL MEANS AND RESOURCES AVAILABLE

This work is developed in the PhD program: Education in the Knowledge Society (García-Peñalvo, 2014, 2019; García-Peñalvo et al., 2019b) within GRIAL research group (García-Peñalvo et al., 2019a; GRIAL 2019), being its portal, accessible from <http://knowledgesociety.usal.es>, the main tool of communication and visibility of the advances. It will include all the publications, stays and attendance at conferences during the course of the work.

Nvivo 10 software will be used for qualitative analysis because its design allows you to analyze and sort qualitative or unstructured data, facilitating the task and reducing the time spent on its implementation.

- Software Nvivo 10 for qualitative analysis.
- SPSS: software to perform quantitative data analysis.
- Tools online: Google Drive, Hangout and Skype, Moodle.
- Cloud storage tools: Dropbox.
- App design tool: iNVision.

The literature review phase of the topics under study will use data access provided by the University of Salamanca.

TIMING SCHEDULE

2021-2022 FIRST YEAR

October 2021 — Research topic selection

October 2021-July 2022 — Literature review (PHASE 1)

October 2021-July 2022 — Theoretical background (PHASE 1)

October 2021-February 2022 — Research plan

October 2021-May 2022 — Meta-analysis of the micro-teaching learning (PHASE 1)

January - July 2022 — Analysis of online learning courses (types; organizational structure strategies)

June 2022 — Annual review of the thesis

October 2022 — Presentation of the research plan at the TEEM conference (Track 16. Doctoral Consortium)

2022-2023 SECOND YEAR

September 2022-June 2023 — Literature review (PHASE 2)

September 2022-June 2023 — Theoretical background (PHASE 2)

November 2022-April 2023 — Technical work with the tools

November 2022 - May 2023 — Design the distance learning course

November 2022- December 2022 Technical validation of the prototype as a part of the development process

January 2023-March 2023 — Technical development (technical external)

January 2023- March 2023 — Design of the questionnaire of the survey questionnaire

March 2023 — Search and acceptance of experts (2-3 experts)

March 2023 - April 2023 — Expert review and survey response

April 2023-May 2023 — Ethics approvals and research permits (PHASE 3)

September 2023-December 2023 — Presentation of the progress of the research study in (at least one) national or international conferences

October 2023 — Conference TEEM 2023

December 2022- May 2023 — Submission of article (Phase 1) and draft article (Phase 2- adhering to the instructions to authors) regarding the results obtained in the analysis.

June 2023 — Annual review of the Thesis

2023-2024 THIRD YEAR

September 2023-November 2024 — Literature review (PHASE 3)

September 2023-December 2024 — Theoretical framework (PHASE 3)

October 2023-December 2024 — Data collection (PHASE 3)

December 2024 — Factor analysis (EFA; CFA)

October 2023-December 2024 — Article submission

November 2023 - January 2024 — Pre –submission (if necessary) and final revision of the Thesis

February 2024 — The Thesis delivery

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