Impact Of Micro-Teaching On Prospective Teachers On Their Academic Performance

Haruna Abubakar¹, Hasnah Binti Mohamed², Megat Aman Zahiri B Megat Zakaria³

¹University of Technology Malaysia
harunshika@gmail.com https://orcid.org/0000-0002-3438-6680

²Educational, Science, Mathematics and Multimedia
Creative Department, School of Education, Faculty of Social Sciences & Humanities, Universiti Teknologi Malaysia 81310 UTM
Skudai Johore, MALAYSIA
https://orcid.org/0000-0001-5119-6742 hasnahm@utm.my

³University of Technology Malaysia, Johor Bahru, MALAYSIA, Faculty of Social Science and Humanities Department of SCIENCE, MATHEMATICS & CREATIVE MULTIMEDIA.

Abstract
Micro-teaching, the contemporary innovation in teaching and learning, is a teacher training strategy that is presently being used all over the globe, and is an opportunity for teacher-trainees to improve their instructional skills. Microteaching encourages in-the-moment classroom instruction, improving fundamental abilities and allowing new and experienced teachers to master numerous teaching skills. This research was conducted to investigate the impact of MCT on teacher-trainees' academic performance. Applying Kcieje and Morgan's technique, the respondents of the research were 133 respondents from various departments, both males and females. The null hypotheses of the study were rejected, and the result revealed that MCT has a significant impact on prospective teachers. The most attractive finding of the results showed that MCT plays a vital role in producing professional teachers, and teachers would not qualify without knowledge of MCT skills.

Keywords: MCT, Prospective Teachers, Impact, Teacher-trainees, Skills.
Introduction
One of the newest advancements in teacher training programmes is microteaching. It serves as a tool for developing the professional skills of student-teachers. Trainees who practice teaching must conduct their instructions in practical or actual situations, and microteaching appears to be an effective method to train them (Ledger & Fischetti, 2020).

In an effort to improve the standard of teacher preparation, Stanford University’s experimental programme initially developed microteaching in 1960 (Elias, 2018). The microteaching practices and assessment of skills applied during the practicum of microteaching applications are extensively used globally in teacher training institutions (Cheng, 2017). Microteaching is understood to be composed of regulated and monitored elements (Santoveña-Casal et al., 2023).

The effectiveness of microteaching in imparting brief but meaningful education in professional learning has attracted a lot of attention (Hong et al., 2017). The teacher-teaching training style known as microteaching, which is currently used all over the world, gives teachers the chance to improve their learning techniques. (Noben et al., 2021)

Microteaching is said to be a technique used mostly in teacher preparation. The teach-reteach cycle is crucial in microteaching, claims Ojo, 2021. Microteaching is a practical and recorded method that uses the educational processes under supervised circumstances. It focuses on methodically organized teacher training model skills (Allela, 2021).

A technique of teacher preparation, known as microteaching, uses micro classrooms (groups of a few students 4 or 5) and micro lessons, lasting between five and twenty minutes. The technique was created and first used by Allen (Ledger & Fischetti, 2020). The technique that has been developed and first executed by Allen and Eve (Allen & Arthur), has also been described as being established in supplying teacher-trainees and teachers with experience, although in an atmospheric environment (Park, 2021). No doubt that, Microteaching has proved to be a beneficial teaching methodology for students (Santoveña-Casal et al.,
Micro-teaching is an effective way to educate learners and encourage them to evaluate their own teaching, through reflection. (Allela, 2021)

Teachers have the chance to sharpen their teaching abilities, by mastering the numerous straightforward tasks, referred to as, teaching skills, by using the teacher training method, known as microteaching, which is used today all over the world (Otsupius, 2014). Microteaching allows teacher-trainees the chance to safely perform in front of a small group of students, while also observing and evaluating other people's performances (Mohammed et al., 2018). Microteaching is an admirable way to develop and build up skills, experience, effective and confidence of learning and teaching skill and acquiring feedback (Richard, 2021).

Saidu (2020), is of the opinion that, the majority of teacher-trainees find the experience initially challenging, because their initial thoughts and experiences have a big impact on how they approach their professional prospects in teaching. When student-teachers are just starting out in their teaching careers, the classroom can be a complicated setting (Bilen, 2015; Kumar, 2016). Microteaching is said to offer a transitional period, so that, one can become used to such a situation (Bilen, 2015). However, before going for teaching practice, every college of education and educational institution in Nigeria holds a series of seminars to equip student-teachers with teaching skills. de Lange & Nerland (2018), posit, after following series of seminars and lectures, designed to educate student-teachers about the curriculum's viewpoints, and skills of lesson planning in their chosen field of study, students are participating in microteaching sessions.

Microteaching is an experimental training method that aims to help, equip, and provide teacher-trainees with different opportunities, purposely to design their own successful and effective teaching stamina, before engaging in real teaching space (classroom) experiences as teachers (Cebeci, 2016). Microteaching is a useful method of teacher preparation that enables aspiring teachers to hone their instructional techniques in a controlled setting before entering the real classroom (Yusuf, 2006). It is believed that,
microteaching greatly aids aspiring instructors to improve both their lesson plans and delivery strategies, while honing their teaching techniques in a controlled setting (Banerjee et al., 2015).

According to a research by Santoveña-Casal, et al. (2023), the prospective teachers who were exposed to microteaching training in colleges or in teacher training institutes, faced fewer difficulties compared to those who were not (Santoveña-Casal et al., 2023). This argument demonstrates how microteaching strategies contribute to teaching effectiveness and competency of teacher-trainee. The purpose of this study is to look into the Impact and Perspective of Microteaching on the Academic Performance of Teacher-Trainees at the Federal College of Education, Zaria, Nigeria.

This research will attempt to answer the following questions:
1. What are prospective student-teachers’ perceptions of MCT influence to the teaching profession?
2. To what extent MCT subject helps student-teachers strengthen their teaching abilities?
3. How can MCT impact student-teachers to pursue careers as teachers?

The following null hypotheses will be tested:
1. According to respondents, there is no significant difference between the perspectives of student-teachers on the MCT’s influence on the teaching profession.
2. MCT has no discernible effects on student-teachers' intentions to enter the teaching profession.
3. According to respondents, MCT has no significant impact on student-teachers.

Literature Review
Microteaching is a subject used in teacher education, to develop teaching skills. It honed abilities and helped in learning more deeply about the teaching craft, by using actual teaching situations (Remesh, 2013). Microteaching appears to be a good technique when a teacher-trainee must carry out their teaching practice or real-life
teaching. According to Yuliana (2018), completing a microteaching subject is must for students in the education faculty, before participating in a field (Yuliani, 2018).

Even in FCE Zaria, microteaching is a requirement for every student before they can engage in teaching practice or graduate (Abubakar, 2022). Not only is it a requirement, but through this microteaching, students are prepared to get practical teaching experience (Hong et al., 2017). Microteaching reduces class complexity and provides performance feedback (Long et al., 2019). Microteaching gives inexperienced teachers a realistic scenario, that simplifies the classroom and makes use of performance feedback (Hong et al., 2017). After watching video demos of effective teachers in action, it allows student-teachers to practice particular teaching skill (Remesh, 2013).

Teachers value microteaching as a training method, and a means of gaining self-confidence and consulting experience. Even though MCT is a practical system for educating teachers and teacher-trainees on what to do in the classroom and how to approach students in the real classroom (Cebeci, 2016). Microteaching is a practical teaching subject in teacher education that is now a workable teacher training skill and technique that will give student-teachers opportunities to apply the teaching skills in an imitation and simulated environment, prior to real teaching settings (Yusuf, 2006). It is believed that, microteaching greatly helps aspiring teachers to improve both their lesson plans and delivery strategies, while refining their teaching techniques and skills in a controlled setting. (Banerjee et al., 2015)

It’s declared that, microteaching gives teacher-trainees the chance to address problems related to how, what, who and where, throughout the training procedure, and to receive feedback on their teaching practices in a positive way. (Özcan & Gerçek, 2019)

Process of Micro teaching
Microteaching has a process that student-teachers must follow step by step. The first step is to plan what to teach, then teach the subject you propose, followed by criticism from colleagues and re-planning and teaching again. See the process in Figure 1.

**Figure 1**

**Microteaching's Relevance to Teacher-trainees**

The argument for using microteaching as a teacher-training methodology has been made by a number of authors (Otsupius, 2014):

1. Compared to the high anxiety level displayed by many starting teachers, while practising in real classrooms. Microteaching offers a low-hazard atmosphere, where students can practise teaching skills, a scenario that could be more favourable to learning. (Koross, 2016)

2. The microteaching environment enables the teacher-trainees to practice specific skills, that they will later be anticipated to use in the traditional classroom, as active engagement by the trainee is preferable, and relevant materials and assignments are essential for efficient learning to take place. (Majoni, 2017)

3. Microteaching makes it possible to repeatedly rehearse techniques that will be utilized in regular teaching.

4. Regardless of the profession you choose, the ancient adage, "practice makes perfect", is true, and also
applies to teaching. By giving them the chance to practice their trade in a supportive setting, microteaching helps teachers become better at what they do.

5. Simultaneously, strengths and flaws in their teaching approach can be identified, enabling them to make changes and enhance their performance.

Role of MCTS in Developing Teacher-Trainee

Insufficient understanding of the value of micro lessons, according to Punia, et al. (2016), has resulted in criticism of them. This study has highlighted the value of MCT in teacher education and teaching in general. Dickerson (2022), postulated that teacher-trainees should have skills of MCT which will empower them to transact with various learning settings and background. MCTS are of important, and it is an actual way of training teacher-trainees in teaching and learning processes (Ping, 2013). MCT is an effective way of developing real teaching strategies.

MCT provides critical thinking, the enhancement of teacher-trainee cooperation, and the sharing of thoughts about MCT lessons among them on how MCT presentation has been used (Arsal, 2015). Whenever teacher-trainees serve as students, they increase their observations, feedbacks, and demonstration skills (2015). MCT improves teacher-trainees with significant self-reflective and critical skills (Kusmawan, 2017); the communication skill will be gained in MCT and will help the teacher-trainee have the courage to speak in public, utilise and manage time successfully (Dickerson 2022).

MCT enhances teacher-trainees with professional lesson planning, competence, confidence, teamwork, and mastery of subject content. It also promotes summary skills, self-training, constructive feedback, time management, and classroom management, ultimately improving students' self-confidence and ability to overcome difficulties.

Method

This research examined the student-teachers’ perspective on microteaching at Federal College of Education, Zaria, in the North-West Geo-Political Zone of Nigeria. It was constructed using a Google Form electronic questionnaire as a survey research design. The college (FCEZ) is the premier college of education in Nigeria; it’s the largest and
oldest teacher-training college in Africa and has been training and producing professional teachers for the past five decades.

Respondents (Participants)
The current research comprised 133 respondents from various schools and departments, both males and females, and their ages ranged between 18-36 years. The respondents’ educational backgrounds stretched from NCE to B.Ed. The participants in the research could be considered as the ambassadors of the college.

The total of number of questionnaires administered on this research to respondents within the area of study is one hundred and thirty-three (133) questionnaires. The percentages of responses are as presented in tables below.

<table>
<thead>
<tr>
<th>Questionnaires Administered</th>
<th>Frequency</th>
<th>Percentage of (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number administered</td>
<td>133</td>
<td>100.0</td>
</tr>
<tr>
<td>Number returned</td>
<td>121</td>
<td>93.2</td>
</tr>
</tbody>
</table>

Instruments
The instrument of the research is a structured questionnaire (Appendix), that was administered to obtain the teacher-trainees’ perspective on the impact of Microteaching. It comprised 4 sections: age, sex, qualification, and questions. After the completion of the first part, the respondents were asked to fill out the questionnaire, comprising 12 statements associated with Microteaching on a 5 Likert scale.

Result and Discussion

<table>
<thead>
<tr>
<th>Microteaching</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microteaching is an effective subject for preparing me to be a professional teacher</td>
<td>121</td>
<td>116.33</td>
<td>1136.71</td>
<td>103.34</td>
</tr>
<tr>
<td>Microteaching helps me develop confidence before teaching practice</td>
<td>121</td>
<td>1.30</td>
<td>.557</td>
<td>.051</td>
</tr>
<tr>
<td>Microteaching prepares me for the effective use of instructional materials</td>
<td>121</td>
<td>104.31</td>
<td>1130.31</td>
<td>102.76</td>
</tr>
</tbody>
</table>
Microteaching assists me in planning the lesson ahead of time 121 1.53 .765 .070
Microteaching helps me with self confidence 121 104.19 1130.33 102.76
Microteaching helps me motivate my students 121 104.44 1130.30 102.76
Microteaching is the backbone of the teaching process 121 104.31 1130.31 102.76
Microteaching taught me how to summarise my lesson 121 104.39 1130.31 102.76
Microteaching boosts students’ classroom management 121 104.56 1130.29 102.75
Microteaching teaches student-teachers the appropriate words to use in class 121 103.79 1122.11 102.01
Microteaching prepares me for the effective use of instructional materials 121 103.71 1122.12 102.011
Microteaching aids my chalkboard usage 121 1.78 1.053 .096
Total 121

The table shows that microteaching is a subject used in teacher education to develop teaching skills. It honed abilities and helped in learning more deeply about the teaching craft, by using actual teaching situations. According to respondents, microteaching is at the onset, and microteaching has no discernible effects on student-teachers’ intention to enter the teaching profession and MCT only is with the least satisfaction followed by students. The MCT with the most satisfaction is hose at the stage with students’ subject used in teacher education, to develop teaching skills more on students. MCT satisfaction declines as the significance between the perspectives of student-teachers on the MCT influence on the teaching profession.

Research Questions
1. What are prospective student-teachers' perceptions of MCT influence to the teaching profession?
2. What is the impact of microteaching on prospective teachers’ academic performance?

Microteaching reduces class complexity. MCT gives inexperienced teachers a realistic scenario, that simplifies the classroom and makes use of performance feedback, the mean scores on Table 2.1 for the differences in MCT subject helps student-teachers to strengthen their teaching abilities, and are presented in tables and were computed and compared as indicated above.
Below is the table showing the impact of MCT to prospective teachers on their academic performance.

<table>
<thead>
<tr>
<th>MCT</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCT-Teaching</td>
<td>121</td>
<td>65.532</td>
<td>678.452</td>
<td>61.677</td>
</tr>
<tr>
<td>Student-Teachers</td>
<td>121</td>
<td>89.569</td>
<td>966.481</td>
<td>87.862</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.2
The table shows the impact of micro-teaching on prospective teachers on their academic performance. In the table, the MCT-teaching has a mean score of 65.532 with a standard deviation of 678.452 and were followed by student-teachers, where the mean score there was 89.569 with a standard deviation of 966.481. From the mean scores, student-teachers have a major influence on the microteaching to teaching profession. The actual test of influence of the different MCT subjects helps student-teachers strengthen their teaching abilities on the MCT impact student-teachers to pursue careers as teachers and it related in the hypothesis.

Independent Samples Test

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>MCT_TEACHER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>2.916</td>
<td>0.090</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.036</td>
<td>0.304</td>
</tr>
<tr>
<td>MCT_STUDENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>2.784</td>
<td>0.098</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.000</td>
<td>0.321</td>
</tr>
</tbody>
</table>

The result of the above is in line with Al Darwish and Sadeghi (2016) said that MCT has been testifying as an actual and active technique of assisting student-teachers in acquiring teaching abilities, and it is the true learning of how to teach.
as a professional teacher in the classroom. It is obvious that microteaching plays a significant role in producing qualified and professional teachers. Shuaibu (2021), is of the view that there is no way you can be a professional without having the skills of teaching, and the skills of teaching are in MCT.

The above observed descriptive statistics for each group, such as the sample size (N) mean, and standard deviation. The homogeneity of variance, the Levene’s test is a statistical test that can determine whether or not the variances of the scores for the groups are equal. The outcome of the Levene’s test determines in which t values to use. If the significant values are large than .05, that means the variances are equal, thus, use the t values on the first line of the table in which equal variances are assumed. If the significant values are smaller than .05, that means the variances are not equal and you must use the t value on the second line, that takes into account, that equal variances are not assumed. To determine if there is a statistically significant difference between the two groups, look the column labeled sig. (2-tailed) under the section t-test for equality of means; you will see two values. Therefore, you can choose the values on the line that correspond to the results of Levene’s test, indicating whether or not there is equal variance. And if Levene’s test indicates that the variances were equal, use the results on the line that assume of equal variances; thus, only pay attention to the sig values on the first line.

Nevertheless, we have seen in the study that the MCT course, teacher-trainees became familiar with the success of their performance, allowing them to assess and enhance their behaviour in the classroom. The MCT allowed the student-teachers to converse with one another and their lecturer, while also coming up with new lesson plans for their works in the classrooms.

The MCTS enjoyed a good effect on every learner teacher’s practise as it taught them how to handle the subject matter practically and impart knowledge by working with their colleagues. As indicated by Brown (1975), this research also confirms that MCTS presentations develop teacher-trainees teaching skills. Banga (2019), found that MCT lessons develop learners with teaching skills once the lesson and skills are scaled down; however, this study
testified to students’ opinions that they like MCT courses and regard them as an instrument that is progressive in raising teacher-trainees’ professional skills.

Findings
MCT subject lessons can build teacher-trainees’ skills in the teaching and learning cycle, and throughout MCT, students build confidence and style on how to teach in a macro society. In this studies, MCT lessons give trainee-teachers the opportunity to put their newly acquired teaching ideas into practice. However, the findings show that MCT lessons have a big influence on the teaching profession, and it’s a subject that gives and boasts the teacher-trainees the courage to be in the teaching system. The findings show that teacher-trainees are prepared for the teaching profession through MCT lessons, which also helps them reach their objectives and get ready for real-world classroom scenarios. The colleges, teacher-trainee, lecturers, and supervisors are key players in creating the profession's spirit.

Recommendations
In view of the findings of this research, it is suggested that educational stakeholders should make the MCT subject to be taught in all Nigerian teachers’ institutions, and all FCEs should put more emphasis on the MCT, both the theory and the practicum, to have qualified and professional teachers that will teach effectively in the O-level stages in our schools. However, the minimum standards of NCE should be strictly bound on as stated no student should go for teaching practice, till they have passed MCT, both the theory and practicum.

The government should make and equip the MCT labs with all resources that are needed. So that soon Nigeria can metamorphose and be counted among the developed nations.

References


