

The Impact of Micro-Teaching on the Teaching Practice Performance of Undergraduate Agricultural Education Students in College of Education, Azare

Tata Umar Sa'ad¹ Shehu Sabo² Aliyu Dahuwa Abdullahi³
1.School of Education College of Education, Azare, Bauchi State, Nigeria
2.Directorate for NCE, ADR CLIS, Misau, Bauchi State, Nigeria
3.College of Education, Azare, Bauchi State, Nigeria

Abstract

Micro-teaching and teaching practices are two integral parts of teacher education programme. Therefore, this study investigated the impact of micro-teaching on the teaching practice of the undergraduate Agricultural Education Students admitted in 2012/2013 Academic session in College of Education, Azare, Bauchi State, Nigeria. The 400 level students who had their 200 and 300 levels teaching practice exercises as well the micro-teaching were purposely selected. The microteaching and teaching practices results were analyzed using t-test for unrelated samples while data gathered via questionnaire were analyzed using simple percentage. The findings of the study led to the conclusions that microteaching is useful in improving the teaching skills, classroom management, confidence etc of teacher trainees. It was also found out that there was no significant difference between the micro-teaching and teaching practice performance of students, that is to say there was significant relationship between the two scores of the said courses. Finally, the study found out that there was significant difference between 200 and 300 levels teaching practice performances and this was attributed to the impact of microteaching. The study therefore, recommended that micro-teaching should be maintained by undergraduate teacher training programmes, it should be made a pre-requisite to teaching practice, there should be need for lecturers and students as well as teacher education degree awarding institutions to take the issue of micro-teaching seriously, etc.

Keywords: Micro-teaching, Teaching Practice, Undergraduate Agricultural Education Students

Introduction

College of Education, Azare is presently running nine undergraduate programmes which are affiliated to the University of Maiduguri and Agricultural Education is one of them. Therefore, what is obtainable in the Faculty of Education of University of Maiduguri is exactly what is required as par admission, teaching and other requirements of the undergraduate programmes in College of Education, Azare. The micro-teaching and teaching practice are compulsory courses that must be passed by the undergraduate students (teacher education students). In College of Education, Azare, the micro-teaching is a two unit course offered in second semester of 300 level while teaching practice is six unit course but divided into two; two units in second semester of 200 level and four units in second semester of 300 level. Therefore, the micro-teaching is always carried out after the 200 level teaching practice exercise and before that of 300 level. The study focused on undergraduate Agricultural Education students admitted in 2012/2013 academic session who had their first and second teaching practice as well as micro-teaching.

Therefore, this study intends to find out the impact of micro-teaching on the teaching practice performance of undergraduate Agricultural Education Students in College of Education, Azare.

Review of Related Literature

Micro-teaching was developed at Stanford University California, United State of America in 1963 and it is now an integral part of teacher education programme world wide. Therefore, it is one of the recent innovations included in teacher education with a lot of positive aspects. Undiyaundeye and Inakwu, (2013) were of the opinion that micro-teaching is one of the recent innovations in teacher education programme which aims at modifying teachers behavior according to modified objects. Aggrawal, (2006) was of the view that micro-teaching is a training programme that aims at simplifying the complexities of teaching process. Mahmud and Rawshon, (2013) summarized that micro-teaching is an instrument for teacher training and it offers the students the opportunity to practice teaching activities under controlled and simulate circumstances. In another vein Allen and Ryan, (1969) in Mahmud and Rawshon, (2013) were of the opinion that micro-teaching has the following characteristics:

- It is a real teaching situation.
- It reduces the complexity of the real classroom teaching situation in terms of the number, the amount of time and amount of learning contents.
- It emphasizes training for mastery of teaching activities such as skills, techniques, methods and

curriculum selection.

- It offers better control over practicing teaching activities because many easily can be manipulated to attain this greater degree of control in the training programme.
- The feedback dimension is expanded considerably because the student can receive meaningful feedback immediately after his performance, and with the help of a variety of technological teaching media as well as observation and interaction-analysis instruments can take the opportunity to improve his performance in light of the feedback provided.

The essence of incorporating micro-teaching in teacher education programme is to enable teacher trainees to teach among themselves for shorter period of time so that they acquire some skills of teaching before embarking into actual teaching practice. After the teaching for at least twenty minutes, observations are normally given by both staff present and colleagues. Akanbi and Usman, (2014) were of the view that micro-teaching was introduced in teachers training programme whereby students teach classes made up of the members of their own student group. They added that micro-teaching enables student teachers to perceive each other's performance through analyzing and reflecting on the experiences. Gavrilovic, Ostojic, Sambunjak, Kirschfink, Steiner et'al (2009) and Sonmez, (2012) were of the view that micro-teaching is an excellent way to build up skills and confidence, to experience a range of lecturing/tutoring styles and to learn and practice giving constructive feedback. Sonmez, (2012) was also of the view that micro-teaching help pre-service teachers develop an awareness of classroom dynamics and pre-service teachers' observation skills as well as their ability to notice what is happening in the classroom environment. They added that micro-teaching gives instructors an opportunity to safely put themselves "under the microscope" of small group audience, but also to observe and comment on other people's performances.

During micro-teaching teacher trainees acquire a lot of skills, experience and knowledge pertaining to teaching. Kilic, (2010) in Sabon and Coklar, (2013) were of opinion that in micro-teaching, pre-service teachers find opportunities to develop skills to prepare lesson plans, choose teaching goals take students' attention, speak in front of group, ask questions, managing time effectively, and assessment techniques. Peeker, (2009) added that micro-teaching assist teacher trainees in doing away with fear of actual teaching. Fernandez, (2010) in Remesh, (2013) was of the view that the "teach, critique, re-teach" model in a dental education program identified micro-teaching as a technique for personality development and confidence-building of health professionals. In another vein, Popovich, (2009) was of the view that micro-teaching helps not only in developing skills of the novice teachers but also assists in comparing the effectiveness of variation of one micro-teaching with another. Subramanlam, (2006) in Sabon and Coklar, (2013) categorically stated that micro-teaching has the following benefits to pre-service teachers:

- It exposes pre-service teachers to the realities of teaching.
- Introduces pre-service teachers to their roles as teachers.
- Helps them to see the importance of planning, decision making, and implementation of instruction.
- Enables them to develop and improve teaching skills.
- Helps them build their confidence for teaching.

In conclusion, it is clear that there are many benefits or advantages of micro-teaching to teachers trainees particularly when it is well planned and executed. Therefore, it is one of the best programme in the process of producing teachers which needs to be upheld and properly maintained and executed so as to get its full benefits.

On the other hand, teaching practice is another important aspect of teacher education programme. Owsu and Brown, (2014) were of the view that teaching practice is an important stage in the professional development of teachers and it provides an opportunity for pre-service teachers to apply the knowledge and theories learned on campus to real classroom. Mahuta, (2009) was of the view that in teaching practice, the student-teachers or teacher-trainees are expected to acquire the following competencies:

- To acquire and be able to manipulate teaching skills in practical form.
- To have a change in focus and have a focal position in teaching and learning.
- To provide attitudinal change and improvement in the exhibition and manipulation of teaching skills and methods.
- To enhance practicalization of teaching into observable and measurable situations.

Akanbi and Usman (2014) in their correlational study of NCE physics students' performance in microteaching and teaching practice found out there was no relationship between the scores of the two programmes. Therefore, micro-teaching performance cannot be used to predict the performance of students in teaching practice in their study. They also found out that there was no significant correlation in the scores of micro-teaching and teaching practice of the same students (physics students). Therefore, this also implies that the performance of students in micro-teaching may not be a predictive for teaching practice. In another vein, Afemikhe, and Egbon, (2011) in their study of relationship between students' performance in micro-teaching and teaching practice in College of Education, Ikere-Ekiti found out that there was a significant difference in performance of students between micro-teaching scores and the average teaching practice scores. In their work it was established that micro-

teaching shows positive predictive strength to teaching practice scores. In another study conducted by Okunloye and Okeowo, (2008) it was found out that there is a low but significant relationship between the micro-teaching and teaching practice performance of the social studies trainees in Colleges of Education of Kogi state. However, they attributed the low positive correlation to other intervening variables such as halo effect or other elements of subjective assessment.

Table 1: Showing the approved grading system for students on teaching practice and micro-teaching as contained in COEA (2011).

Raw Score	Letter Grade	Grade Point
70 – 100	A	5.0
65 – 69	B+	4.5
60 – 64	B	4.0
55 – 59	C+	3.5
50 – 54	C	3.0
45 – 49	D	2.0
40 – 44	E	1.0
00 – 39	F	0.0

Source: Undergraduate Students' Handbook

Objectives of the Study

This study intends to achieve the following objectives:

- i. To find out the benefits derived by undergraduate Agricultural Education Students admitted in 2012/2013 Academic session from micro-teaching that improved their teaching practice performance?
- ii. To find out the difference between micro-teaching and 300 level teaching practice performances of undergraduate Agricultural Education students admitted in 2012/2013 Academic Session in College of Education, Azare.
- iii. To find out the difference between the 200 and 300 levels teaching practice performances of undergraduate Agricultural Education students admitted in 2012/2013 Academic Session in College of Education, Azare.

Research Question

This intends to answer the research question below:

1. What are the benefits derived by undergraduate Agricultural Education students admitted in 2012/2013 Academic Session from micro-teaching that improved their teaching practice performance?

Hypotheses

The following null hypotheses were raised in order to be tested in this study.

- H₀₁ There is no significant difference in the performance of undergraduate Agricultural Education students admitted in 2012/2013 Academic Session in micro-teaching and the 300 level teaching practice in College of Education, Azare.
- H₀₂ There is no significant difference in performance between the 200 and 300 levels teaching practice of undergraduate Agricultural Education students admitted in 2012/2013 Academic Session in College of Education, Azare.

Research Methodology

The designs that were used in this study were ex-post facto. Ex-post facto was used because it permitted the researchers to use the variables as they occur without their manipulations. Afermikhe and Egbon, (2011) were of the view that ex-post facto is systematic empirical enquiry in which the researcher has no control over the independent variables, and cannot manipulate them either but will take and use the variable as they have occurred. All the twenty-eight (28) undergraduate Agricultural Education students who were admitted in 2012/2013 session and participated in 2013/2014 micro-teaching as well as 2012/2013 and 2013/2014 teaching practice exercise were used in the study.

The data for this study were discrete and continuous. The discrete data were collected through an eight item questionnaire with the response format of “Yes” and “No” on the importance of micro-teaching in improving the art and skills of teaching of teacher trainees and simple percentage was used in its analysis. While, the continuous data were the results of the micro-teaching, as well as that of 200 and 300 levels teaching practice collected from the school of undergraduate's exams office and t-test was used in their analysis.

Data Presentation and Analysis

This section focuses on the presentation and analysis of the collected data from the respondents.

Table 2: Showing Agricultural Education Students' Grade Points in Micro-teaching, 200 & 300 Levels Teaching Practice

S/NO.	Micro-teaching	200 Level Teaching Practice	300 Level Teaching Practice
1.	3.5	4.5	3.5
2.	4.0	3.0	4.5
3.	5.0	4.0	5.0
4.	4.0	5.0	4.5
5.	5.0	5.0	4.0
6.	3.5	3.0	5.0
7.	5.0	3.0	4.5
8.	4.0	3.5	5.0
9.	4.0	4.0	3.5
10.	3.5	4.0	5.0
11.	4.0	4.0	5.0
12.	3.5	3.0	4.0
13.	3.5	4.5	3.5
14.	3.5	4.0	4.5
15.	4.0	4.0	3.5
16.	3.0	4.0	5.0
17.	5.0	4.0	4.5
18.	3.5	4.5	5.0
19.	3.5	4.0	4.0
20.	3.5	4.0	3.5
21.	5.0	4.0	3.5
22.	5.0	4.0	5.0
23.	4.0	4.0	4.5
24.	3.5	4.0	4.0
25.	5.0	5.0	3.5
26.	5.0	4.0	4.0
27.	4.0	4.0	4.5
28.	4.5	3.0	5.0

Source: School of Undergraduate Exams Office.

Research Question 1: What are the benefits derived by undergraduate Agricultural Education from micro-teaching that can improve their teaching practice performance?

Table 3: Showing the Response of Research Question One

S/No.	Items	Responses	
		Yes %	No %
1.	Does micro-teaching helped you develop and properly manipulate teaching skills?	98	02
2.	Does micro-teaching helped you develop confidence in the art of teaching?	96	04
3.	Does micro-teaching helped you do away with anxiety and fear in teaching?	96	04
4.	Does micro-teaching provide you with the ability to manage classroom situation well?	90	10
5.	Does micro-teaching helped you in the area of selecting teaching goals and preparation of lesson plan?	92	08
6.	Does micro-teaching helped in developing your ability of asking questions and speaking in front of group?	92	08
7.	Does micro-teaching developed your ability of selecting appropriate instructional materials in lesson delivery?	91	09
8.	Does micro-teaching helped you manage time effectively in classroom?	91	09

Source: Fieldwork, 2015

In table 3 above, 98% of the respondents were of the view that micro-teaching assisted them in developing and manipulating teaching skills. 96% were of the view that micro-teaching helped them in

developing confidence in the art of teaching as well as reduced their anxiety and fear. 90% of respondents were of view that microteaching assisted them in having the ability of managing their classes well. On the other hand, 92% of the respondents were of the opinion that micro-teaching assisted them in selecting proper teaching goals, preparing good lesson plans as well as ability of speaking in front of the group and asking questions. 91% of the respondents were of the view that micro-teaching provided them with a necessary ability of selecting and using appropriate instructional materials as well as proper time management in their lesson delivery.

Therefore, is now clear that the undergraduate Agricultural education students in College of Education, Azare were helped by micro-teaching through developing and properly manipulating teaching skills, developed confidence, reduced anxiety and fear, ability of managing classroom situations, proper selection of teaching goals and preparation of lesson plans, improvement in ability of asking questions and speaking in front of group as well as effective time management.

Table 4: Showing the calculated t value of Micro-teaching and 300 Level Teaching Practice Performances of undergraduate Agricultural Education Students admitted in 2012/2013 Academic Session.

Group	N	X	SE	Df	T	Level of significance
Micro-teaching	28	4.11				
			2.058	54	0.1020	
Teaching Practice.	28	4.32				

Significant at critical value = 1.96

From table 4 above, the X of 4.11 for micro-teaching when compared with X of 4.32 of teaching practice shows that relationship exists between the two scores or performances. This study revealed that there was no significant difference between the micro-teaching and teaching practice performances of undergraduate Agricultural Education Students admitted in 2012/2013 Academic session. In table 4, the null hypothesis that there is no significant difference between micro-teaching and 300 level teaching practice performances is accepted since $t_{cal} (0.1020) < t_{tab} (1.96)$ at 0.05 level of significance. This implies that there is a positive relationship between micro-teaching and 300 level teaching practice performances of undergraduate Agricultural Education students admitted in 2012/2013 academic session. Therefore, micro-teaching performance can be used to predict teaching practice performance of students.

Table 5: Showing the calculated t value of 200 and 300 levels Teaching Practice Performance of Agricultural Education Students Admitted in 2012/2013 Academic Session.

Group	N	X	SE	Df	T	Level of significance
200 T. P.	28	3.96				
			0.1621	54	2.22	
300 T. P.	28	4.32				

Significant at critical value = 1.96

From table 5 above, the null hypothesis that there is no significant difference in performance between the 200 and 300 levels teaching practices of undergraduate Agricultural Education students admitted in 2012/2013 Academic Session in College of Education, Azare is therefore rejected since $t_{cal} (2.22) > t_{tab} (1.96)$ at 0.05 level of significance. Hence, there is significant difference between 200 and 300 levels performance in teaching practice of undergraduate Agricultural Education students admitted in 2012/2013 Academic session. The performance in the teaching practice is much higher in 300 level as indicated by the two means. The X of 4.32 at 300 level is higher than the X of 3.96 at 200 level. The improvement may be attributed to the micro-teaching and supervisors' observations and corrections during the 200 level exercises they had before embarking to the 300 level teaching practices. The issue of intervening variable like lecturer' subjectivity in assessment cannot be forgotten.

Discussion of Results/Findings

The discussion of findings is presented according to the research question and hypotheses raised in this study.

Research Question One

The results of the analysis of the only research question raised in the study showed that micro-teaching is assisting undergraduate Agricultural Education students in developing teaching skills, confidence, reduction in the level of their anxiety and fear, ability of managing classes, selecting proper teaching goals, preparing good lesson plan, ability of speaking in front of group as well as selection of appropriate instructional materials and proper time management. Therefore, this study tallies with the findings of Mahuta, (2009), Popovich, (2009), Gavrilovic, Ostojic, Sambunjak, Kirschfink, Steiner et'al (2009), Sonmez, (2012), Kilic, (2010) in Sabon and Coklar, (2013), Peeker, (2009), Fernandez, (2010) in Remesh, (2013), Subramanlam, (2006) in Sabon and Coklar, (2013), Owosu and Brown, (2014), Akanbi and Usman, (2014) who were of view that micro-teaching assist teacher trainees in acquiring teaching skills, confidence, reduction in anxiety and fear, proper class management, selection of teaching goals, preparation of lesson plan, ability of speaking in front of group,

selection of proper instructional materials as well as proper time management.

Hypothesis One (H₀₁)

The results of the analysis of hypothesis one (H₀₁) raised in the study showed that there was no significant difference between the micro-teaching and teaching practice performances of undergraduate Agricultural Education Students admitted in 2012/2013 Academic session. This implies that there is a positive relationship between micro-teaching and 300 level teaching practice performances of undergraduate Agricultural Education students admitted in 2012/2013 academic session because $t_{cal} (0.1020) < t_{tab} (1.96)$. This agrees with the findings of Afemikhe, and Egbon, (2011) in their study of relationship between students' performance in micro-teaching and teaching practice in College of Education, Ikere-Ekiti found out that there was a significant relationship in performance of students between micro-teaching scores and the average teaching practice scores because $t_{cal} (9.90) > t_{tab} (1.96)$ at 0.05 level of significance. The study also tallies with the findings of Okunloye and Okeowo, (2008) who found out significant relationship between the micro-teaching and teaching practice levels performance of the Social Studies trainees because the $t_{cal} (4.11) > t_{tab} (1.96)$. however, this study disagrees with the findings of Akanbi and Usman who found out that there was no significant relationship between the performance of physics students in micro-teaching and teaching practice because the X of 3.77 for micro-teaching group when compared with teaching practice with X of 4.48 shows no relationship exists between the groups which is also indicated by the $t_{cal} (0.93)$ when compared with $t_{tab} (2.060)$ at 0.05 alpha.

Hypothesis Two (H₀₂)

The results of the analysis of hypothesis one (H₀₂) raised in the study showed that there is significant difference between 200 and 300 levels performances in teaching practice of undergraduate Agricultural Education students admitted in 2012/2013 Academic session. The performance in the teaching practice is much higher in 300 level as indicated by the two means as X of 4.32 at 300 level and X of 3.96 at 200 level and this might be connected with the students' experience of micro-teaching and as well as the actual teaching practice experience at 200 level. This agrees with the opinions of Mahuta, (2009), Popovich, (2009), Gavrilovic, Ostojic, Sambunjak, Kirschfink, Steiner et'al (2009), Sonmez, (2012), Kilic, (2010) in Sabon and Coklar, (2013), Peeker, (2009), Fernandez, (2010) in Remesh, (2013), Subramanlam, (2006) in Sabon and Coklar, (2013), Owosu and Brown, (2014), Akanbi and Usman, (2014) who were of view that micro-teaching assist teacher trainees in acquiring teaching skills, confidence, reduction in anxiety and fear, proper class management, selection of teaching goals, preparation of lesson plan, ability of speaking in front of group, selection of proper instructional materials as well as proper time management. The study also tallies with the opinion of Owosu and Brown, (2014) who were of the view that teaching practice is an important stage in the professional development of teachers and it provides an opportunity for pre-service teachers to apply the knowledge and theories learned on campus to real classroom.

Conclusions

Based on the findings of this study, the following conclusions were made:

This study concluded that the undergraduate Agricultural education students in College of Education, Azare were helped by micro-teaching through developing and properly manipulating teaching skills, developed confidence, reduced anxiety and fear, ability of managing classroom situations, proper selection of teaching goals and preparation of lesson plans, improvement in ability of asking questions and speaking in front of group as well as effective time management.

This study concluded that there is a positive relationship between micro-teaching and 300 level teaching practice performances of undergraduate Agricultural Education students admitted in 2012/2013 academic session. Therefore, micro-teaching performance can be used to predict teaching practice performance of students.

The study also concluded that micro-teaching assisted undergraduate Agricultural Education students in developing teaching skills, confidence, reduction in the level of their anxiety and fear, ability of managing classes, selecting proper teaching goals, preparing good lesson plan, ability of speaking in front of group as well as selection of appropriate instructional materials and proper time management which ultimately led to improvement in teaching practice performance at 300 level when compared with that 200 level exercise.

Recommendations

This study recommends among other things the following:

Micro-teaching should be maintained in undergraduate teacher education programmes because of its positive contributions in improving the teaching skills, confidence, reduction in the level of their anxiety and fear, ability of managing classes, selecting proper teaching goals, preparing good lesson plan, ability of speaking in front of group as well as selection of appropriate instructional materials and proper time management.

Micro-teaching should be made a prerequisite for undergraduate students to go for the 300 level

teaching practice. This is because in the study it was found out that there was no significant difference in the micro-teaching performance and that of teaching practice. In other words, there was a relationship between micro-teaching performance and that teaching practice among the undergraduate agricultural education students admitted in 2012/2013 session.

There should also need for lecturers as well as degree awarding institutions to give serious attention to micro-teaching and extend the same to their students so that they too give a serious attention.

There is need to video record micro-teaching so that students can see themselves while presenting and take note of the areas of their strengths and weaknesses in the art of teaching.

References

- Afemikhe, O. A. & Egbon, F. O. (2011). Relationship Between Students' Performance in Microteaching and Teaching Practice in College of Education, Ikere- Ekiti, Nigeria. Retrieved on <http://www.icidr.org/doc/ICIDR%20PDF%20contents/journal%20of%20research%20in%20education%20and%20society/JRESSvol2%20nos3%20december%202011/relationship%20between%20students%20performance.pdf>
- Akanbi, A. O. & Usman, R. S. (2014). A Correlational Study of NCE Physics Students' Performance in Micro Teaching and Teaching Practice. Retrieved on 4th May, 2015 from <http://www.apexjournal.org/jerbs/archive/2014/Feb/fulltext/Akanbi%20and%20Usman.pdf>
- Aggarawal, J. C. (2006). *Principles, Methods and Techniques of Teaching*. Second Revised Edition. New Delhi: VIKAS Publishing House PVT Ltd.
- COEA (2011). *Undergraduate Student's Handbook*. Gombe: JIWEL & Con. Paper Co. Ltd.
- Mahmud, I. & Rawshon, S. (2013). Microteaching to Improve Teaching Method: An Analysis on Students' Perspectives. Retrieved on 4th October, 2014 from <http://www.iosrjournals.org/iosr-jrme/papers/Vol-1%20Issue-4/J0146976.pdf?id=1689>
- Mahuta, M. G. (2009). *An Introduction to the Teaching Profession for Teacher-Trainees*. Sokoto: Mathi Publishers.
- Okunloye, R. W. & Okeowo, A. O. (2008). Relationship between Social Studies Teacher Trainees' Performance in Microteaching and Teaching Practice in Colleges of Education, Kogi State, Nigeria. <https://www.unilorin.edu.ng/publications/okunloyerw/Relationship%20between%20Social%20Studies%20Teachers%20Trainee's%20Performance.pdf>
- Owosu, A. A. & Brown, M. (2014). Teaching Practice Supervision as Quality Assurance Tool in Teacher Preparation: Views of Trainee Teachers about Supervision in University of Cape Coast. Retrieved on 15th October, 2014 from www.impactjournals.us/download.php?...Teaching%20Practice%20Supe
- Peker, M. (2009). The Use of Expanded Micro-teaching for Reducing Pre-Service Teachers' Teaching Anxiety about Mathematics. Retrieved on 15th October, 2014 from http://www.academicjournals.org/article/article1380535315_Peker.pdf
- Remesh, A. (2013). Microteaching, an efficient technique for learning effective teaching. Retrieved on 26th September, 2014 from <http://jrms.mui.ac.ir/index.php/jrms/article/view/8964>
- Saban, A. & Coklar, A. N. (2013). Pre-Service Micro-Teaching Method in Teaching Practice Classes. Retrieved on 15th October, 2014 from <http://www.tojet.net/articles/v12i2/12221.pdf>
- Sonmez, D. (2012). Affects of Microteaching Course on Student Teaching Practice. Retrieved on 4th October, 2014 from <http://www.eera-ecer.de/ecer-programmes/conference/6/contribution/17309/>
- Undiyaundeye, F. & Inakwu, A. A. (2013). Micro-Teaching Experiences in Pre-Service Education Programme. Retrieved on 15th October, 2014 from <http://www.infonomics-society.org/IJTIE/Micro%20Teaching%20Experiences%20in%20a%20Pre%20Service%20Early%20Childhood%20Education%20Programme.pdf>
- Tanja, G; Ostojic, M; Sambunjak, D; Kirschfink, M; Steiner, T. et'al (2009). Microteaching. Retrieved on 4th October, 2014 from <http://www.bhmed-emanual.org/book/export/html/36>

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

