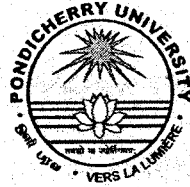


A Minor Research Project Proposal  
on

**E-CONTENT DEVELOPMENT ON MICRO TEACHING**

*Submitted to*



School of Education  
Pondicherry University  
Pondicherry

*Under the Scheme of*



Government of India  
Ministry of Human Resource  
Development

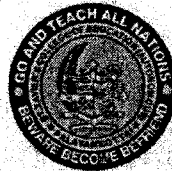
**Pandit Madan Mohan Malaviya National Mission on Teachers and  
Teaching (PMMMNMTT)**

Department of Higher Education, Ministry of Human Resources and Development  
Government of India, New Delhi

*Submitted by*

**Dr S. Sherlin (Principal Investigator)**

Assistant Professor of Physical Science  
St. Xavier's College of Education (Autonomous)  
Palayamkottai.



**ST. XAVIER'S COLLEGE OF EDUCATION (AUTONOMOUS)**  
(Re-accredited (3<sup>rd</sup> Cycle) by NAAC at 'A' Grade with CGPA: 3.67)  
Palayamkottai - 627 002.

**September 2019**

Principal  
St. Xavier's College of Education  
(Autonomous)  
Palayamkottai - 627 002

From

26-09-2019

Dr S. Sherlin  
Assistant Professor of Physical Science  
St. Xavier's College of Education (Autonomous)  
Palayamkottai.

To

**Prof. Mumtaz Begum, Co-ordinator, PMMMNMTT/MHRD/GOI**  
Dean & Head, School of Education  
Silver Jubilee Campus, Pondicherry University  
R.V. Nagar, Kalapet, Puducherry-605 014.

Respected Madam,

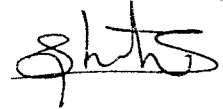
**Sub:** Submission of Minor Project Proposal on "E-Content Development on Micro Teaching" -reg.

St. Xavier's College of Education established in 1950 has set its mark of excellence in the educational map of India. Our college offers B.Ed., M.Ed., M.Phil. and Ph.D. in education. Being an autonomous institution since 2006, NAAC re-accredited our college with 'A' grade, with CGPA of 3.67 for a period of five years from 2012-'13 and has extended the validity of the given status to our college for two more years. The college has produced 390 M. Phil., and 115 Ph. D. scholars in education.

As per the information and guidelines, herewith I am submitting a minor project proposal entitled, "E-Content Development on Micro Teaching" along with the necessary documents for your kind perusal. Kindly consider and do the needful.

Thanking You.

Yours faithfully,



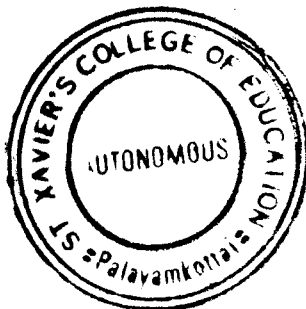
Encl.: Annexure I in the prescribed format

Project Proposal with Abstract and Budget Proposal

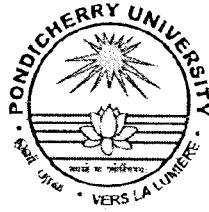
*Recommended and  
forwarded*

*Manavaly*  
Principal

St. Xavier's College of Education,  
(Autonomous)  
Palayamkottai - 627 002.



Principal  
St. Xavier's College of Education  
(Autonomous)  
Palayamkottai - 627 002



Annexure I

**NATIONAL MISSION ON  
TEACHERS AND TEACHING**

**Pondicherry University  
SCHOOL OF EDUCATION**

**SUBMISSION OF PROPOSAL FOR MINOR RESEARCH PROJECT**

**PART – A**

1. Broad Subject : **Education**
2. Area of Specialization : **E-content Development**
3. Duration : **Six Months**
4. Principal Investigator
  - a. Name : **Dr S. Sherlin**
  - b. Sex : **Male**
  - c. Date of Birth and Age : **12-05-1983, 36 Years**
  - d. Category : **OBC**
  - e. Qualification : **M.Sc. (Phy.), M.Ed., M.Phil., NET (Edn.), Ph.D. (Edn.)**
  - f. Designation : **Assistant Professor of Physical Science**
  - g. Address: Office : **St. Xavier's College of Education (Autonomous), Palayamkottai, Tamil Nadu- 627 002.**
5. Name of the Institution where the project will be undertaken:
  - a. Department : **Education**
  - b. College : **St. Xavier's College of Education (Autonomous), Palayamkottai.**
  - c. Affiliating University : **Tamil Nadu Teachers Education University, Chennai.**

d. Whether the institute is located in rural/backward area : **No**

6. Whether the College is approved under Section 2 (f) and 12 B of the UGC Act?

**Yes**

7. Teaching and Research Experience of Principal Investigator :

a. Teaching experience : UG 12 Years PG 4 Years

b. Research experience : **4 Years (M.Ed.)**

c. Publication:

Papers Published : **5 (List Enclosed)**

Books Published : **Edited a Book (Detail is Enclosed)**

## PART – B

### I. Proposed Research Work

#### i. Project Title

#### E-CONTENT DEVELOPMENT ON MICRO TEACHING

#### ii. Introduction

Teaching is, no doubt, a noble profession, since its service is rendered for the entire well-being of man, his body, mind and spirit. It is a highly professional activity which demands specialized knowledge, skill and behaviour (Chaudhary, 2012). The success of teaching depends upon how far the teacher is able to motivate the pupil for acquiring new knowledge (Bhatnager & Mullick, 2005). Edmund Amidon (1967) defined teaching as an interactive process, primarily involving classroom talk which takes place between teacher and pupils and occurs during certain definable activities (Tarachand & Pahiya, 2006). Teaching is not 'telling and testing' rather, it is a complex art of guiding students through variety of selected experiences towards the attainment of appropriate teaching-learning goals. Teaching is a skill that is best developed through practice underpinned by theory, research and reflection. Teaching is perceived, as a set of teaching skills where in a teaching skill is a set of teaching behaviours that facilitate or bring about a specific instructional objective. Teaching skill is group of teaching acts or behaviours intended to facilitate pupils learning directly or indirectly. It is assumed that if a person is trained to acquire the sub-skills of teaching one by one and then if all these sub skills are integrated together, becomes an efficient teacher. For this microteaching is the remedy.

#### Micro Teaching

Micro-teaching is one of the recent innovations in teacher education programmes, which aims to modify teacher's behaviour according to the specific objectives. It was developed by Professor Dwight Allen and his colleagues in the teacher training programme at the Stanford University in 1963 (Radha Mohan, 2007). It is a laboratory technique of teacher training in which the complexities of normal class room teaching are simplified. Microteaching is a training technique which requires student teachers to teach a single concept using specified skill to a smaller number of pupils in a short duration of time.

According to Allen and Ryan (1968), Microteaching is defined as a system of controlled practice that makes it possible to concentrate on specific teaching behavior and to practice teaching under controlled conditions (Vanaja, 2012).

In the words of Buch (1968), micro teaching is a teacher education technique which allows teachers to apply clearly defined teaching skills to carefully prepared lessons in planned series of five to ten minutes encounters with a small group of real students, often with an opportunity to observe the results on video-tape (Sharma, 2003).

From these definitions and discussions it is clear that micro teaching is a teacher behaviour modification technique which is used in the teacher education of all levels for the preparation of teacher with efficient teaching.

### **Features of Micro-teaching**

The following are the specific features of micro teaching;

- i. Micro teaching is a training technique, not a teaching technique.
- ii. Micro teaching is real teaching, though the situation is a stimulated one (Radha Mohan, 2010).
- iii. It is highly individualized training device to prepare effective teacher.
- iv. It is relatively a new innovation in the field of teacher education.
- v. It is an analytical approach to training. In micro teaching setting the time, number of pupils, methods of feedback and supervision may be manipulated (Sharma, 2003).
- vi. It allows increased control of practice.
- vii. Micro teaching is scaled down the complexities of real teaching.
  - a) It reduces the class size up to 5-10 pupils.
  - b) It reduces the duration of period 5 to 10 minutes.
  - c) It reduces the size of the topic.
  - d) Practice one skill at a time.
- viii. It provides immediate and adequate feedback, which help the prospective teachers get an insight into his/her performance and can avoid the unwanted behaviours as well as mannerisms.
- ix. No problem of indiscipline and less administrative problems as it minimizes the complexities of normal classroom teaching.
- x. It provides opportunity to select one skill at a time, practice and mastered through micro teaching.
- xi. Does not require sophisticated gadgets and can be used as an integral part of teacher training, but use of video recording or close circuit television makes the observation more objective (Sharma, 2003).

### **Why Micro Teaching?**

A teacher in a real classroom have to adopt numerous techniques, procedures, activities, behaviours, methods and skills to elevate his/her teaching efficiency and thus learning among the students. Teaching is a complex activity which comprises introducing a lesson, explaining, questioning, praising or encouraging the students, demonstrating, using teaching aids and concluding the lesson. Along with these lots of non-verbal behaviours like smiling, gesturing and body movements are also used. Collectively it is called as teaching skills. But, practically it's not so easy to apply or use these skills effectively without proper understanding or without an exposure. That's why teacher educators are giving more emphasis on micro teaching as an essential technique that enhance efficient teaching.

### **Why e-content?**

Learning takes place 1 % through Taste, 1.5 % through Touch, 3.5% through Smell, 11% through Hearing and 83% through Sight. A picture is worth a thousand words - Chinese Proverbs. This depicts the important role of visual presentation in teaching-learning process. From the words of Marc Prensky (2001), at present the teaching community is interacting with the digital generation of learners, since they are digital natives. So, in order to bridge the gap between the digital natives (today's learners) and digital immigrants (today's teachers), the teachers/educators have to think of a digital learning method and which pinpoints e-learning. Any content in electronic form is known as e-content. It is the combination of text, images, audio, video, graphics and animation with visual effects. It is a knowledge packing of conversations, lectures, songs, stories, ballads, manuscripts, prints, audios and videos in the digital forms. E-content provides multi-sensory learning experiences to the learners with digital convergence. It follows the principle of 'Chunking', i.e., the content is broken into small elements or meaningful parts for the preparation of Short Learning Objects (SLOs'), which means a granule of content which usually prepared for a duration of 5-7 minutes with a vision to create content as a standalone learning experience and so it will be more easy and convenient for the students to follow and learn. It ensures interactivity, accessibility, reusability and interoperability. It is an emerging way of thinking about learning content in 'self-study' mode or 'live and real time' learning.

At the end of this proposed project, the investigator will produce 15 SLOs' as mentioned below in the specific objectives and which will be used as a guiding module by the teacher education institutions and teacher educators for the effective preparation of

prospective teachers as skillful and competent future teachers as well as can be used for the training of in-service teachers also.

### **iii. Objectives**

#### *General Objectives*

1. To develop e-content modules on micro teaching and its validation.

#### *Specific Objectives*

##### **Module I**

1. To prepare a Short Learning Object for introduction to micro teaching.
2. To prepare a Short Learning Object for steps in micro teaching.
3. To prepare a Short Learning Object for micro teaching cycle.
4. To prepare a Short Learning Object for phases of micro teaching.
5. To prepare a Short Learning Object for the pros and cons of micro teaching.
6. To prepare a Short Learning Object for Link Lesson.

##### **Module II**

7. To prepare a Short Learning Object for Skill of Introduction.
8. To prepare a Short Learning Object for Skills of Stimulus Variation.
9. To prepare a Short Learning Object for Skills of Explaining.
10. To prepare a Short Learning Object for Skills of Probing Questions.
11. To prepare a Short Learning Object for Skills of Reinforcement.
12. To prepare a Short Learning Object for Skills of Illustrating with Examples.
13. To prepare a Short Learning Object for Skills of Blackboard Usage.
14. To prepare a Short Learning Object for Skills of Increasing Pupils Participation.
15. To prepare a Short Learning Object for Skills of Closure.

### **iv. Methodology**

The principal investigator propose to write scripts, prepare power point slides, collect images and videos, record audio and videos and validation of the e-content to be published.



v. Plan of work and targets to be achieved.

Month	Target
October and November	Script Writing and Correction (Grammar, Spelling, Consistency, Meaning, Factual Items, Names, etc).
December	Preparation Power Points and Collection of Images/Videos
January	Audio and Video Recording
February	Editing, Finalizing and Validating the Modules
March	Submission of Modules

**References**

- Bhatnagar, S., & Mullick, M. (2005). *Development of Education System in India*. Meerut: Lall Book Depot.
- Chaudhary, S. S. (2012). Teacher Education: An Introspection. *University News*, 50(19), 10-11.
- Dennis, S. P. (2011). *Teaching Skills*. New Delhi: APH Publishing Corporation.
- Konow, Rachel (2016). Micro Teaching an Efficient Technique for Learning Effective Teaching Skills: Pre-service Teachers' Perspective. *IRA-International Journal of Education & Multidisciplinary Studies*, 04(02), 289-299.
- Mahmud, Imran & Rawshon, Shahriar (2013). Micro Teaching to Improve Teaching Method: An Analysis on Students' Perspectives. *IOSR Journal of Research & Method in Education*, 1(4),69-76.
- Mohan, Radha (2010). *Innovative Science Teaching (3<sup>rd</sup> ed.)*. New Delhi: Prentice Hall of India Pvt. Ltd.
- Mohan, Radha (2010). *Teaching of Physical Science*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- Nachimuthu, K. (2012). Need of E-Content Developments in Education. *Education Today*, 03(02), p. 72-80
- Rawat & et. al. (2005). *Essentials of Educational Technology*. Meerut: R. Lall Book Depot.
- Sharma, R. C. (2003). *Modern Science Teaching (5<sup>th</sup> ed.)*. New Delhi: Dhanpat Rai

Publishing Company.

Sharma, R.A. (2013). *Educational Administration and Management*. Meerut: R. Lall Book Depot.

Singh, Y. K. & Sharma, Archnessh (2012). *Micro Teaching*. New Delhi: APH Publishing Corporation.

Tarachand & Pahiya N.P. (2006). *Essentials of Instructional Technology*. New Delhi: Animol Publications.

Vanaja, M. (2012). *Techniques of Teaching Physical Science*. Hyderabad: Neelkamal Publications Pvt. Ltd.

<http://www.marcprensky.com/writing/Prensky%20%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>

Whether the teacher has received support for the research project from any agency under Major, Minor or from any other agency? If so, please indicate:

No

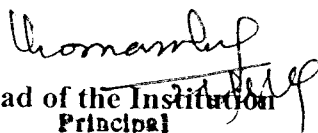
#### BUDGET PROPOSAL

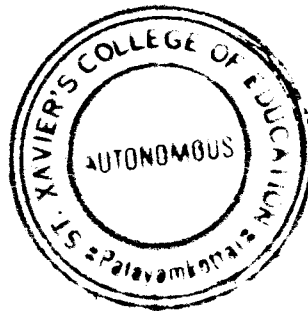
Item	Estimated Expenditure Non-Recurring(Rs.)	Estimated Expenditure Recurring(Rs.)
Books and Journals	5,000/-	
Editing Software/s	25,000/-	
Travel and Field Work		20,000/-
Special Requirements		25,000/-
Printing & Stationary		5,000/-
Submission of Research Report		7,000/-
Contingency		20,000/-
Printing Services		43,000/-
Consumables		20,000/-
Overhead Charges		10,000/-
<b>Total</b>	<b>30,000/-</b>	<b>1,50,000/-</b>
<b>Total (Non-Recurring + Recurring)</b>		<b>1,80,000/-</b>

**To certify that**

- a. The College/Institution is approved under Section 2(f) and 12(B) of the UGC Act and is fit to receive grants from the UGC.
- b. General physical facilities, such as furniture/space etc., are available in the Department/College.
- c. I shall abide by the rules governing the scheme in case assistance is provided to me from the SoE/PU for the above project.
- d. I shall complete the project within the stipulated period. If I fail to do so and if the SoE/PU is not satisfied with the progress of the research project, the Commission may terminate the project immediately and ask for the refund of the entire amount (with interest) released by the SoE/PU.
- e. The above Research Project is not funded by any other agency.

  
Signature of Principal Investigator

  
Principal/Head of the Institution  
Principal  
St. Xavier's College of Education  
(Autonomous)  
Palayamkotta - 627 002.



## E-CONTENT DEVELOPMENT ON MICRO TEACHING

### ABSTRACT

Teaching is not 'telling and testing' rather, it is a complex art of guiding students through variety of selected experiences towards the attainment of appropriate teaching-learning goals. Teaching is a skill that is best developed through practice underpinned by theory, research and reflection. It is perceived as a set of teaching skills, where in a teaching skill is a set of teaching behaviours that facilitate or bring about a specific instructional objective. It is believed that if a person is trained to acquire the sub-skills of teaching one by one and then if all these sub skills are integrated together, becomes an efficient teacher. For this micro teaching is the remedy.

A teacher in a real classroom have to adopt numerous techniques, procedures, activities, behaviours, methods and skills to elevate his/her teaching efficiency and thus learning among the students. Teaching is a complex activity which comprises introducing a lesson, explaining, questioning, praising or encouraging the students, demonstrating, using teaching aids and concluding the lesson. Along with these lots of non-verbal behaviours like smiling, gesturing and body movements are also used. Collectively it is called as teaching skills. But, practically it's not so easy to apply or use these skills effectively without proper understanding or without an exposure. That's why being a teacher educator, I would like to give emphasis on micro teaching as it is the fundamental and essential training technique that help to prepare effective prospective teachers with efficient teaching. But why e-content is a hanging question.

Learning takes place 1 % through Taste, 1.5 % through Touch, 3.5% through Smell, 11% through Hearing and 83% through Sight. A picture is worth a thousand words Chinese Proverbs. This depicts the important role of visual presentation in teaching-learning process. From the words of Marc Prensky (2001), at present the teaching community is interacting with the digital generation of learners, since they are digital natives. So, in order to bridge the gap between the digital natives (today's learners) and digital immigrants (today's teachers), the teachers/educators have to think of a digital learning method and which pinpoints e-learning. Any content in electronic form is known as e-content. It is the combination of text, images, audio, video, graphics and animation with visual effects. It is a knowledge packing of conversations, lectures, songs, stories, ballads, manuscripts, prints, audios and videos in the digital forms. E-content provides multi sensory learning experiences to the learners with digital convergence. It follows the

principle of 'Chunking', i.e., the content is broken into small elements or meaningful parts for the preparation of Short Learning Objects (SLOs'), which means a granule of content which usually prepared for a duration of 5-7 minutes with a vision to create content as a standalone learning experience and so it will be more easy and convenient for the students to follow and learn. It ensures interactivity, accessibility, reusability and interoperability. It is an emerging way of thinking about learning content in 'self-study' mode or 'live and real time' learning.

At the end of this proposed project, the investigator will produce 15 SLOs' as mentioned below in the specific objectives and which will be used as a guiding module by the teacher education institutions and teacher educators for the effective preparation of prospective teachers as skillful and competent future teachers as well as can be used for the training of in-service teachers also.

## LIST OF PAPERS AND BOOKS PUBLISHED

### Book

1. Edited a book entitled, "Professionalism in Facing the Challenges of Education" with ISBN: 978-81-919565-2-9

### Research Papers in Peer-Reviewed Journals Only

1. A Study on Soft Skills and Teacher Effectiveness of Primary School Teachers. JUPITER (2014). Vol. 2, No. 2
2. A Study on Thinking Styles of Prospective Teachers in relation to their Computer Literacy. ACE RESEARCH PROPELLER (2016). Vol. 1, No. 1.
3. A Study on Teaching Competency of Prospective Teachers in relation to their Computer Literacy. EDUREACH (2017). Vol. 1, No. 2.
4. Relationship between Soft Skills Management and Teaching Competency of Prospective Teachers. RESEARCH AND REFLECTIONS ON EDUCATION (2019). Vol. 17, No. 1.
5. Soft Skills Management of Prospective Teachers with respect to Computer Literacy and Browsing Internet. LIGHT HOUSE JOURNAL OF EDUCATIONAL REFLECTIONS (2019). Accepted for Publication.