CHALLENGES IN LESSON PLANNING AND ICT INTEGRATION IN THE 21st CENTURY CLASSROOM: BASIS FOR INTERVENTION PROGRAM IN TEACHING INTERNSHIP

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Abstract: This study explored the challenges of the 52 pre-service teachers in lesson planning and ICT integration in the 21st century classroom of Iloilo Science and Technology University- Miagao Campus, Miagao, Iloilo. The challenges encountered in Lesson Planning were: poor articulation of instructional objectives, failure to address and integrate the three key components of lesson plan Learning Objectives, Learning activities and Assessment. As to the ICT Integration, unavailability of personal laptops and equipment for academic purposes, lack of ICT competencies for both the pre-service and Cooperating teachers, and limited Internet accessibility were the challenges encountered. Pre-service Teachers' Workshop was the output of the study. FGD and document analysis were administered in data gathering while Thematic Analysis was employed in the data interpretation. It is recommended that the preservice teachers may be provided assistance such as mentoring, remediation, training workshops and in scheduling common planning periods to plan lessons and ICT Integration.
Keywords: Challenges, Lesson Planning, ICT Integration, Intervention Program Teaching Internship

1. INTRODUCTION

The outbreak of Covid-19 Pandemic has brought challenges in the academe, much more in the preparation of teachers in planning the lessons as well as integrating technology to assure continuous learning among the students in these trying times.

Good lesson planning as emphasized by Sudhakar (2017), is essential to the process of teaching and learning. A teacher who is prepared is well on his/her way to a successful instructional experience. The development of interesting lessons takes a great deal of time and effort. As a new teacher one must be committed to spending the necessary time in this endeavor.

Emergence of information and communication technology has ushered a new era in our civilization in which digitalization has almost become a better alternative, because it has influenced every facet of human life including education. Transformation should take place in the way our teachers teach and students learn (Fathima, 2013).

The relevance of a teacher in the 21st century is determined by the will to develop professionally and appropriately, while teacher development, according to MacDougall and Squires (1997), should focus on the following aspects in pre-service training:

• Integration of ICT into existing curricula • Curricular changes related to the use of ICT including changes in instructional design

• Underpinning educational theories.

2. RELATED LITERATURE

Teachers' most important trait is confidence. Lesson planning can help the teacher to be well prepared and be aware of what he/she intends on teaching the students. There are a number of benefits to writing a lesson plan. First, lesson planning produces more unified lessons (Jensen, 2001). It gives teachers the opportunity to think deliberately about their choice of lesson objectives, the types of activities that will meet these objectives, the sequence of those activities, the materials needed, how long each activity might take, and how students should be grouped. Teachers can reflect on the links between one activity and the next, the relationship between the current lesson and any past or future lessons, and the correlation between learning activities and assessment practices. Because the teacher has considered these connections and can now make the connections explicit to learners, the lesson will be more meaningful to them. The lesson planning process allows teachers to evaluate their own knowledge with regards to the content to be taught (Reed & Michaud, 2010).

Planning a class is a process that involves the teacher, the student and the environment surrounding the class dynamics. It is important to create a good environment in the classroom that promotes learning and motivation for students to participate in the different activities proposed by the teacher who should analyze the necessities he or she sees in the classroom. It is the teacher's task to take into account different factors such as the students' school context, familiar issues and motivations that could affect the development of the class and the learning process. That is why it is important to consider that the class is not just a physical facility to learn but a space where they can have fun, work cooperatively and collaboratively. The classroom is a place where learners know new people and construct knowledge since they acquire information and share what is learned and experienced with others. All the elements that teachers have to take into account when developing a class should be described in their lesson planning because teachers can foresee the activities and reflect upon what they see,

perceive and realize in their classes. In this regard, the lesson plan sheds lights on strengths and weaknesses and encourages teachers to evaluate what is to be reinforced (Jensen, 2001).

Likewise, Jones (2018) emphasized that a teacher should be prepared not only to teach the students but also to make sure that they take some fruitful thought regarding the lesson at the end of the class. The aims and objectives should answer questions regarding all the angles of the course. The teacher should prepare different explanation methods for the students to understand the topic easily. The methods could include giving real-life examples or creating a hypothetical situation related to the topic. Including activities related to the lesson is helpful for students to remember the topic being taught.

Meanwhile, the ethnic diversity in schools is increasing with the passage of time as the people from rural areas have realised the importance of education. Thus, the learning capacity of each student varies from one another. Lesson planning can minimise this understanding gap if the teacher plans the lesson effectively. This can be done by taking the first step that is, start teaching from the core so that nobody is left behind and that every student is on the same page and then the teacher moves ahead with the topic. The driving force behind lesson planning is the motivation for the teacher and hunger to learn more by students is what keeps a teacher going (Jones, 2018), further asserted.

On the other hand, ICT integration in education generally means technology-based teaching and learning process that closely relates to the utilization of learning technologies in schools. Due to the fact that students are familiar with technology and they will learn better within technology-based environment, the issue of ICT integration in schools, specifically in the classroom is vital. This is because, the use of technology in education contributes a lot in the pedagogical aspects in which the application of ICT will lead to effective learning with the help and supports from ICT elements and components (Jamieson-Procter et al., 2013). It is right to say that almost all ranges of subjects' starts from mathematics, science, languages, arts and humanistic and other major fields can be learned more effectively through technology-based tools and equipment. In addition, ICT provides the help and complementary supports for both teachers and students where it involves effective learning with the help of the computers to serve the purpose of learning aids (Jorge et al., 2003). Computers and technology does not acts as a replacing tools for quality teachers but instead they are considered as an add-on supplements needed for the better teaching and learning.

The need for ICT integration in education is crucial, because with the help of technology, teaching and learning is not only happening in the school environment, but also can happen even if teachers and students are physically in distance. However, ICT integration is not a one-step learning process, but it is a continual process of learning

that provides proactive teaching-learning environment (Young, 2003). ICT can be used in various ways where it helps both teachers and students to learn about their respective subject areas. A technology- based teaching and learning offers various interesting ways which includes educational videos, stimulation, storage of data, the usage of databases, mind-mapping, guided discovery, brainstorming, music, World Wide Web (www) that will make the learning process more fulfilling and meaningful (Finger & Trinidad, 2002). Moreover, students will benefit from ICT integration where they are not bounded to the limited curriculum and resources, instead hands-on activities in a technology-based course is designed to help them to stimulate their understanding about the subject. It also helps teachers to design their lesson plans in an effective, creative and interesting approach that would result in students' active learning. Previous researches proved that use of ICT in teaching will enhance the learning process and maximizes the students' abilities in active learning (Jamieson-Procter et al., 2013).

The study of Ghavifekr, & Rosdy (2015), which focused on teaching and learning with technology and its effectiveness of ICT integration in schools, indicated that ICT integration has a great effectiveness for both teachers and the students. Findings indicate that teachers' well-equipped preparation with ICT tools and facilities is one the main factors in success of technology-based teaching and learning.

To sum up, lesson planning and technology integration in the 21st century classroom is an instructional choice by the teacher, and should be developed by the prospective teachers. This should always involve collaboration and deliberate planning.

3. METHODOLOGY

Qualitative design was used in determining the pre-service teachers' challenges in lesson planning and ICT integration.

The participants of the study were the 53 BEED pre-service teachers purposively taken, of Iloilo Science and Technology University Miagao Campus for Academic Year 2019-2020.

Purposive sampling method was used.

4. RESULTS AND DISCUSSIONS

1. Majority of participants indicated that lesson planning is a challenging and time-consuming task and teaching in the field was a new and exciting experience. The interview results showed that the pre -service teachers dealt with some problems during

the process.

a. Poor articulation of instructional objectives

The participants gave unifying answers that the way to construct, choose the lesson objectives to be formulated adversely affected their tasks and teaching efficiency.

One student declared that,

"Actually, until the end of practice teaching it remains difficult to me. The very challenging part is making objectives. I don't know how to make an objective in my own words."

Another participant said,

"It's hard to think what will be the objectives of the lesson. I had to think of several objectives wherein it would suit the learning needs of the students".

b. Failure to address and integrate the three key components of lesson plan

Learning Objectives, Learning activities and Assessment

The participants described their experiences as they conveyed their stand points as regards matching the objectives, activities and assessment as one challenge they encountered as they reflected more of their teaching internship. As the participants gathered around facing each other in the group, each one seemed to process already and so was able to contribute to the ideas.

One of the discussants affirmed:

"It was quite hard finding appropriate and suitable strategies for every topic I should discuss. I also took hard times in thinking and preparing various motivations and energizers daily".

Probing further, another participant reiterated:

"At first, I am having difficulties specifically in choosing the activity to integrate in my class discussion. Activities should be consistent especially in the needs of the learners. It should be done with fineness in order for the learners to understand the topic given"

Varied thoughts on how they valued their teaching internship were revealed. Notably, another meaningful response was recounted:

"I think the great challenge is always finding the suitable materials as well as activities according to the objective of the lesson and exam". I find hard to prepare a learning activities that can drive in my learning objectives and can suit also to my student's capabilities since they are Grade One pupils.

I need to think the best and most effective strategy that will suit and fit the learning

strategy of the learners I undertake."

c. On the need to Facilitate Learning with Innovative Strategies

The participants expressed thoughts on the significance of the use of strategies and techniques in the teaching-learning process. The Failure to sequence the lesson in an engaging and meaningful manner is another dilemma among them.

One discussant said:

"At first I find difficult to find the appropriate strategy to use especially in experiment which is hard to find materials need to use in science laboratory "

I need to spend a lot of time to think the best adjective and learning activities. Sometimes I feel hard in planning because I don't have any idea on how to write an effective lesson plan to suit in my pupils. I worked hard and research more examples of strategies related to the topic. I spent a lot of time to think on how I explain the topic and how to engage my pupils.

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d. On developing assessment procedure

Planning for instructional evaluation is always a challenge. The participants shared common realizations that planning for an exam to be integrated in the lesson plan is a factor for a successful teaching-learning process.

One discussant narrated:

I was also challenged on making activity and exams that is suited in my topic. Because of that, I do realized lesson plan is very important coz it is our guide in our daily lesson. There is a lot more planning the test and preparation that is involved for class the next day

2. Furthermore, there are challenges encountered by the Pre-service teachers in ICT integration.

 a. Unavailability of personal laptops and other ICT Equipment for academic purposes

Technology integration is in demand now a day that this was also noticeable as one major concern in the conduct of classes.

One discussant asserted:

In my 4 months practice teaching in my cooperating school, I never use Power point presentation because the major challenges I faced while using ICT included unstable internet connection, lack of training, I don't have enough idea on how to operate some

technology to use in teaching and I also I don't have laptop to use.[sic]

The insufficient number of computer units in schools for ICT integration is indeed a challenge that hinders pre- service teachers to engage more their learners with the technology that support their interest.

Another discussant cited:

The challenges that we encounter in our center is there is no technology/ multimedia. During my first day/months of our internship there is absence of ICT integration in our classroom. There was no TV in the month of August - October. Since there is absence of TV we make use the traditional way of teaching. We/I use to write in the Manila paper and writing in the chalkboard. I use to think that, if there is a presence of technology maybe learning is much more knowledgeable for there is a lot of resources that I could adapt the multimedia and internet.[sic]

b. Lack of ICT competencies for both the pre-service teachers and Cooperating Teachers

Struggle is real because every day I fixed projector and laptop for my discussion. And it so hard to arranged because my laptop and the projector is not compatible so I find any instructional materials to continue my discussion.[sic]

ICT for me is my difficult thing that I have to face for the improvement of myself. In my lesson I always used ICT for video clips and I know I'm not really good in using technology.

Some problems that I encountered in using projector like in adjusting the brightness, speaker and in operating it.[sic]

When my files transferred into my critic teacher's laptop the pictures are jumping and I don't know how to fix it. It waste most of my time in editing where I need to make a new one and start from the beginning.[sic]

c. Limited Internet accessibility

My only problem is lack of facilities and also the signal is poor

But the problem was we don't have Wi-Fi, connector and projector. Wi-Fi is need in research, downloading etc. and because the school can't provide that I need to go in the computer shop and research the topic that I will discuss.

One factor that I wasn't able to integrate ICT it is because my critic teacher is a traditional teacher her way of teaching is in a traditional way. Even she uses it traditionally still the class discussion is not boring. She just uses Manila paper as a material and discussion of lesson then she let the learners to copy after she discussed. The challenges that I had experienced in the ICT integration is the availability of laptop and also an internet connection.

5. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Findings

1. The existing predominant challenges encountered by the Pre-service teachers in

Lesson Planning and ICT Integration in the 21st Century Classroom included the following:

a. Poor articulation of instructional objectives

b. Failure to address and integrate the three key components of lesson plan

c. Learning Objectives, Learning activities and Assessment

d. Developing Assessment Procedures

2. The existing predominant challenges encountered by the Pre-service teachers in the ICT Integration in the 21st Century Classroom included the following:

a. Unavailability of personal laptops and other ICT Equipment for academic purposes

b. Lack of ICT competencies for both the pre-service teachers and Cooperating Teachers

c. Limited Internet accessibility

3. Furthermore, the participants asserted that in their teaching internship, they found difficulty in some areas of lesson planning and ICT integration.

4. The intervention program to be implemented to enhance the skills in lesson planning and ICT integration of the Pre-service teachers will be called:

Creating Lesson Plans and ICT Pedagogy Integration: Pre-service Teachers Training Workshop

Conclusions

1. The pre-service teachers are aware of the importance of lesson planning and ICT use but along the way experienced problems in their planning, preparations and implementations of their lessons focusing on these two.

2. It can be deduced that the pre-service teachers may be not spending considerable time to design the lesson plan. If teachers spend more time on designing lesson plans, they will become meticulous in designing and in executing it. This can be attributed to the fact that some of them still need to work for a living or they live far from families

whom they need to give them support and errand.

3. It seems to appear that the need to have a brief training on lesson plan making as well as technology use is a must and be done by the office of teaching internship with the collaboration of ICT experts in the campus before deploying prospective teachers in their internship.

Recommendations

1. Pre-service teachers may be provided strong scaffolded assistance in the form of mentoring, guidance, remediation, training workshop and in scheduling common planning periods to plan lessons and ICT Integration.

2. The Office of Teaching Internship may continuously strengthen the collaboration and partnership between the schools and the university through establishments of more MOA among schools responsible for teacher preparation.

3. The university may review the modalities of carrying out teaching internship to provide student-interns with the pre-requisite skills for undertaking self-evaluations of their competency on lesson planning and ICT Integration.

4. Feed backing among Cooperating Teachers should be constantly done with emphasis on the 'dangers' of signing lesson plans that are poorly formulated as this has the effect of undermining the efforts to prepare competent future teachers.

5. Aside from the DepEd accredited downloadable lesson plan templates, pre-service teachers may be exposed to more opportunities where they could become more creative in planning lessons rather than be dependent on the available downloadable files.

6. Future researchers may explore the problems in the functional daily lesson plans preparation and find ways on how to minimize such problems especially in the advent of technologies.

References

[1] Fathima, L (2013). Analysis on information and technology awareness. Journal of Education and Practice, 1-6.

[2] Finger, G., & Trinidad, S. (2002). ICTs for learning: An overview of systemic initiatives in   the Australian states and territories. Australian Educational Computing, 17(2), 3-14

[3] Ghavifekr, S. & Rosdy, W. (2015). Teaching and learning with technology: Effectiveness   of ICT   integration in schools. International Journal of Research in Education and Science (IJRES), 1(2), 175-191.

[4] Hague, C. and Williamson, B. (2009). Digital participation, digital literacy, and school subjects: A review of the policies, literature and evidence. Bristol: Future lab.

[5] Jamieson-Proctor, R., Albion, P., Finger, G., Cavanagh, R., Fitzgerald, R., Bond, T., & Grimbeek, P. (2013). Development of the TTF TPACK Survey Instrument. Australian Educational Computing, 27(3),26-35.

[6] Jenkins, H. (2006). Confronting the challenges of participatory culture: Media the 21st Century. MacArthur; Chicago Ill. p 4.

[7]   Jensen, L. (2001). Lesson planning guidelines for Pre- service English Teachers. Retrieved from https:// books. google.com. ph/books? hl=en&lr =&id=Bpl1AwAAQBAJ&oi=fnd&pg=PP1&dq=jensen+2001+lesson+planning

[8] Jones, S. (2018). Reasons why it is important to plan lesson. Retrieved from https://www.eln.io/blog/3-reasons- lesson-planning

[9] Jorge, C. M. H., Gutiérrez, E. R., García, E.G., Jorge M. C. A., & Díaz, M. B. (2003). Use of   the ICTs and the perception of e-learning among university students: A differential   perspective according to gender and degree year group. Interactive Educational Multimedia, 7, 13-28.

[10] Kozma, R. B. (2005). National policies that connect ICT-based education reform to economic and social development. An Interdisciplinary Journal on Humans in ICT Environments, 1(2), 117-156.

[11] Leach, J., et al. S. (2004). Deep Impact: A study of the sse of hand- held for Teacher Professional Development in Primary Schools in the Global South. European Journal of Teacher Education, 27(1), 5-28.

[12] McDougall, A., & Squires, D. (1997). A framework for reviewing teacher professional development programs in information technology. Journal of Information Technology for Teacher Education, 6(2), 115-126.

[13] Reed, C. & Michaud, C. (2010). Goal - Driven lesson planning for teaching. USA: University of Michigan Press.

[14] Saad. M.M. (2013). Information and Communication Technology in building prospective teachers' knowledge base. Retrieved from https://www.academia.edu/29159113/information_and_communication_techno logy_in_building_prospective_teachers_knowledge_base_cohort_of_secondar y_mathematics_pre_service_teachers_in_lebanon_dissertation