

AN EXPLORATION OF THE PEDAGOGICAL PRACTICE OF PRE-SERVICE TEACHERS USING PRODUCTIVE PEDAGOGIES*

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Abstract

The major purpose of this study is to explore the pre-service teachers' pedagogical practice using productive pedagogies. Productive pedagogies emphasize improving students' intellectual reasoning and makes teaching-learning in schools more applicable to the students' everyday lives by creating supportive environments that accommodate diversity and achieve agendas of equity. In line with the research objectives, this study follows an ethnographic case study. By using criterion sampling techniques, 12 participants were selected. Five types of data collection methods: semi-structured interview protocol, classroom observational protocol, reflective journals, documents (pre-lesson plan and post-lesson plan) and focus group interview were applied in this study. The participants were firstly observed and interviewed to confirm their initial pedagogical practices and engaged with productive pedagogies with four microteaching cycles. Then, participants were allowed to implement productive pedagogies in practicum and observed their pedagogical practices and interviewed by focus group interview. After that, thematic analysis, cross-case analysis, and summary-based reporting approach were employed to organize the data analysis. According to the results of this study, pre-service teachers' pedagogical practices enhanced when they were exposed to the training with productive pedagogies, especially in the areas of implementing supportive classroom environment. The noticeable strengths of implementing productive pedagogies by pre-service teachers in practicum practice have emerged as: (a) improvement in pedagogical practices, (b) guiding teachers' preparation, (c) valuable guide for teaching, and (d) engagement in professional development opportunities. They also encountered some key challenges that faced their implementation and limited their best efforts: metalanguage, time and class size as contextual factors. Therefore, the overall results proved that this study irrefutably contributes and fulfills some degree for enhancing the pre-service teachers' practicum practice although it would not support the absolute accomplishment for all teacher education sectors.

Keywords: pedagogy, productive, productive pedagogies, pedagogical practice, ethnographic case study

Introduction

Quality teachers are critical to achieve quality educational outcomes and improve students' learning for the development of the nation. According to Khin Zaw (2013), what Myanmar needs today is to develop a fully integrated programme for teacher education and professional development, based on a new pedagogy, or a new innovative approach. The initial preparation of teachers is critically important in teacher development and should reflect both the expectations which the community holds about the role of the teacher and the skills and abilities of individuals who enter the profession. Therefore, quality pre-service teacher education is needed in order to produce quality teachers for the pedagogically oriented society.

In the 21st century, there are many challenges facing contemporary teacher education and teacher educators still have a great deal to learn regarding how to best prepare future teachers to professionally handle the complexities of unknown classrooms. Teacher education is not just concerned with acquisition of knowledge, but equally and more importantly with the utilization

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of knowledge. Practicum is a crux of their preparation for the teaching profession. Performance during practicum provides some basis for predicting the future success of the pre-service teacher. Inadequate teaching practice impacts on the level of teacher readiness. So, it is crucial to highlight the pre-service teachers' pedagogical practices during their practicum practice. Hayes, D., Mills, M., Christie P., and Lingard, B. (2006) argued that productive pedagogies provide a comprehensive and multi-dimensional framework with potential for enhancing the quality of teaching and the quality of teacher education. By using productive pedagogies in pre-service teachers' practicum practice, there can be qualified teachers who can handle the future of the society with education. Therefore, this study will develop to explore the pre-service teachers' pedagogical practice using productive pedagogies and it can support as an effective way for enhancing pedagogical practices of pre-service teachers by building a bridge between theory and practice.

Purpose of the Study

The main purpose of this study is to explore the pre-service teachers' pedagogical practice using productive pedagogies. The specific objectives of the study are as follows:

1. to investigate how productive pedagogies enhance pre-service teachers' pedagogical practices
2. to explore the challenges of pre-service teachers in implementing productive pedagogies in their practicum
3. to make suggestions and recommendations for enhancing the pre-service teachers' pedagogical practice

Research Questions

In order to formulate the intended research objectives, two research questions are constructed. They are as follows.

1. To what extent do productive pedagogies enhance the pre-service teachers' pedagogical practice?
2. What are the challenges that the pre-service teachers encountered while implementing productive pedagogies in their practicum?

Definition of Key Terms

Pedagogy

Pedagogy informs teacher actions, judgments, and teaching by taking into consideration theories of learning, understanding of students and their needs, and the backgrounds and interests of individual students (Shulman, 1987).

Productive

The concept of productive is an indication of the production of learning outcomes in the classrooms (Hayes, Mills, Christie, & Lingard, 2006).

Productive Pedagogies

Productive pedagogies can be defined as a framework for teaching that aims at improving students' intellectual reasoning, makes school teaching and learning more connected to students' everyday lives, and addresses the concerns of equity support that students need (Alsharif & Atweh, 2012).

Pedagogical Practice

Pedagogical practice is the union of theory and practice in the exercise of teaching and apprehending knowledge, in pedagogical action. These practices involve being aware of the entire educational process and the tools used by teachers to make it happen (Silva, 2021).

Ethnographic Case Study

Ethnographic case study is defined as a study focusing on describing the activities such as institutional culture or teaching methods of a specific group and the shared patterns of culture/behavior the group develops over time (Mills & Gay, 2016).

Limitation of the Study

According to Creswell (2008), despite all the chronicled strengths of qualitative research methods, researchers also advance limitations or weaknesses of their study that may affect their results. Therefore, although this study was conducted with great care and effort, there were a number of important limitations: (a) as this study was conducted during the Covid-19 pandemic, the practicum is designed and implemented only within on-campus, (b) being an ethnographic case study, this study is limited to 12 third-year pre-service teachers at the Sagaing University of Education, (c) this study was conducted only with two dimensions of productive pedagogies: intellectual quality and supportive classroom environment in consideration with time constraints and (d) this study is limited on the fact that the individual differences between the participating pre-service teachers have not been considered.

Review of Related Literature

Educational philosophy is committed to laying down a plan for what is considered to be the best education absolutely. It governed any productive teaching methods or activities, training program and educational practices. No educational system can ever be better than its teachers. No teacher education program is complete without a course on educational philosophy. Therefore, the practicing pedagogue should require understanding educational philosophies related to different educational areas. In this study, pragmatism, constructivism and social constructivism are deeply taken into philosophical considerations to explore the pre-service teachers' pedagogical practice using productive pedagogies.

Productive pedagogies provide a comprehensive starting point for reflecting on pre-service teachers' pedagogical practices and ensuring all students are engaged with intellectually challenging and relevant curriculum provided in a supportive environment. It is a framework for pre-service teachers to integrate theory into practice with meaningful experiences by themselves. It comprises four dimensions: intellectual quality, supportive classroom environment, connectedness, and recognition of difference.

Based on these theoretical considerations, this proposed model for pre-service teachers' pedagogical practice was developed to provide a situation in which they learn through productive pedagogies as the necessary ingredients for quality teaching and learning for designing future quality education through practicum practice. This study was developed in consideration of Gilbert's praxeonomic training model, Flanders' interaction analysis model, V³SK model of National Institute of Education (NIE), Cognitive Apprenticeship model, The Quality Outcomes, Teaching and Learning (QOTL) model, and New South Wales (NSW) quality teaching model. The proposed model includes four phases: assessing pre-service teachers' initial knowledge and

skills about pedagogies, training with productive pedagogies, implementing productive pedagogies in practicum practice, and consolidating.

Method

Research Design

In this study, to investigate how productive pedagogies enhance pre-service teachers' pedagogical practice; a qualitative ethnographic case study was used. Ethnographic case study tends to focus on institutional culture or particular group, teaching methods, or behaviours (Merriam, 1998, cited in Hamilton & Corbett-Whittier, 2013). Using ethnography and case study, this qualitative ethnographic case study was an opportunity to reveal insight into the pre-service teachers' pedagogical practices as culture and how the key informants relate while engaging in practicum practice.

Subjects

In this study, being a qualitative ethnographic case study, the purposeful sampling strategy was employed. Criterion sampling was used among purposive sampling approaches. As the number of participants, 12 third year pre-service teachers from Sagaing University of Education were selected with three pre-determined criteria and this is the adequate sample for qualitative case study.

Table 1 Criteria for the Selection of the Participants

Participant	Criterion 1	Criterion 2	Criterion 3
12 third-year pre-service teachers	Different training experiences in the first two years (direct intake & bridge)	Different specializations	Willingness to participate in the study

Instruments

According to Merriam (1988), using multiple methods of data collection is a major strength of qualitative case studies. In this study, five types of data collection methods were used to answer the research questions and achieve the research objectives. Data were collected through semi-structured interview protocol, classroom observational protocol, reflective journals, focus group interview, and documents from pre-service teachers (pre-lesson plan and post-lesson plan).

Procedure

Training with productive pedagogies for the pre-service teachers' pedagogical practice was designed based on the literature and the instruments required for the study were constructed under the guidance of the supervisor. Then, the main study was conducted with the participating pre-service teachers according to the research design.

Data Analysis

As being an ethnographic case study, among three major approaches to qualitative data analysis, the social anthropological approach was adopted in this study to obtain in-depth information about pre-service teachers on the use of productive pedagogies in practicum. Under the research questions, three methods were used to organize the data analysis: thematic analysis, cross-case analysis, and summary-based reporting approach were employed.

Findings

There is no statistical significance in qualitative inquiry as there is in quantitative inquiry, rather qualitative findings are judged by their substantive significance (Patton, 2002). In this study, the key findings that emerged from the analysis of the multiple sources of data are presented according to the research question, among five ways of organizing and presenting qualitative data analysis by Cohen, Manion, and Morrison (2007) so that all the relevant data from various data streams are collated to provide a collective answer to a research question.

Research Question 1: To what extent do productive pedagogies enhance the pre-service teachers' pedagogical practice?

Pedagogical shifts after implementation of four dimensions of productive pedagogies for pre-service teachers' practicum practice are described with effect matrix by Miles, Huberman, and Saldana (2014). The productive pedagogies framework includes four dimensions: intellectual quality, supportive classroom environment, connectedness and recognition of difference. In this study, two dimensions were applied to enhance the pre-service teachers' practicum practices. Accordingly, two effect matrixes related to the pedagogical shifts of pre-service teachers are provided in the following section.

Effect Matrix: Pedagogical Shifts after Implementation of Intellectual Quality for Pre-Service Teachers' Practicum Practice

Productive Pedagogies	Early Use	Later Use
Intellectual Quality	▪ Bloom's taxonomy ▪ Questioning (rarely open-ended) ▪ Building prior knowledge	▪ Bloom's taxonomy (use effectively and efficiently) ▪ Effective questioning skill- scaffolding (no right or wrong answer) and sustained interaction ▪ Building prior knowledge (concept/key map) ▪ De Bono's hats ▪ Gardner's multiple intelligences ▪ Discovery learning
	▪ Deep understanding ▪ Building block process	▪ Deep understanding ▪ Building block process ▪ Constructing their own knowledge
	▪ Limited perspectives on classroom interaction ▪ Simple explanations of language	▪ Different perspectives (sustained interaction about the substance of the lesson) ▪ High levels of talk about language with different ways in different contexts ▪ Real life-authentic learning ▪ Substantive conversation

Concerning the application of intellectual quality dimension within teachers' teaching practices, the qualitative data from classroom observations showed that teachers attempted to apply some activities that aimed to deepen students' understanding of the main ideas that teachers taught. One pre-service teacher also mentioned that:

“Focusing on higher-order thinking in learning process helps students to understand the subject matter and enjoy the activities better.” (PT10, Reflective journal)

The participants in this study appeared to focus on teaching strategies such as the use of Bloom's taxonomy, De Bono's thinking hats, and Gardner's multiple intelligences. They readily identified these strategies which they had been taught at university and exposed without really understanding and demonstrating how this specially and practically related to intellectual quality. One participant stressed by saying that:

"I just did teaching strategies early, this sounds bad, but I actually thought more about how I was delivered it rather than just content focus. Because we've come off all the different subjects where it's all content focus and that kind of part for me came secondary." (PT5, Reflective journal)

The participants effectively applied, in accordance with the observations, De Bono's hats such as green hat (creativity), yellow hat (benefits), white hat (fact), red hat (feeling), blue hat (process), and black hat (caution) in their teaching learning process. They could use these hats efficiently and wisely depending on the student ability and classroom situation.

The pre-service teachers' questioning skills improved over the training, they seemed to believe that their questioning of students would lead the class to the destination that they had previously chosen and determined. One pre-service teacher asserted that:

"I've developed my style of questioning after the training and knowing sometimes when to use open-ended questions and knowing what kinds of question should be used for students' better achievement." (PT5, Reflective journal)

The participants implemented discovery learning after training with productive pedagogies. One example of discovery learning that one participant put into practice is that:

"Well, I would say that science would be a lot of modeling and experimentation and stuff like you would say "Alright we're going to see, um, why you know oil and water what happens with them, etc." So, I give them the materials and then they would describe what's happening instead of saying that oil and water don't mix well and why it is. I wouldn't just tell them the answer first and give them an experiment that allows them to discover it." (PT 8, Reflective journal)

With regard to the substantive conversation, according to the observation results, the pre-service teachers' pedagogical practice enhanced in using high levels of talk about language with different contexts. One of the pre-service teachers mentioned that:

"I gradually focused on substantive conversation in my classroom because it increased students' thinking and confidence so they interacted with each other and exchanged ideas, which in turn, facilitated effective understanding of the concepts discussed." (PT4, Reflective journal)

In particular, one participant also indicated that:

"The enthusiasm and interaction of students are apparent when they not only rely on delivery of knowledge, but on their self-reliance in accessing to information and using the high-order thinking to combine facts or analyse ideas. This helps students to gain a better understanding of the lessons." (PT6, Reflective journal)

Another participant has put the usefulness of productive pedagogies in this way:

"I think the framework is necessary for pre-service teachers, because it helps us to become teachers in ways that change the picture of a teacher from one who just transfers knowledge to the student." (PT3, Reflective journal)

Effect Matrix: Pedagogical Shifts after Implementation of Supportive Classroom Environment for Pre-Service Teachers' Practicum Practice

Productive Pedagogies	Early Use	Later Use
Supportive Classroom Environment	▪ Teacher-student ▪ Whole class	▪ Student-student ▪ Teacher-student ▪ Social support ▪ Respect and care
	▪ Student work	▪ Rule and behavior management ▪ Academic engagement ▪ Valuing their own opinions ▪ Developing students' self-esteem

Concerning the above effect matrix, it can be seen that all pre-service teachers' pedagogical practices related to supportive classroom environment progress according to the training with productive pedagogies.

The pre-service teachers felt that the idea behind supportive classroom environment was very close to their traditional way of teaching. One of the pre-service teachers said:

“This dimension depends on the teacher's personality such as teacher's ability to control her class, her effective ability to assess students' work and her excellence in dealing with her students. From the beginning, I feel that I am empowered to achieve this dimension.” (PT12, Reflective journal)

The pre-service teachers stressed that encouraging students to work in groups or pairs contributed towards raising the level of classroom social support. One participant stated that:

“Providing tasks that required group work helped students to have long and extensive discussions on the task. Students exchanged ideas, experiences, and skills and helped each other to understand the concepts. This resulted in creating a great spirit of cooperation between groups.” (PT9, Reflective journal)

The pre-service teachers seemed to provide a good social climate in which students feel that it is beneficial to question the teachers about plans and methods that affect their learning. In a group-work situation, each member of the group had opportunities to discuss, explain and reflect their ideas with each other. Another pre-service teacher commented that:

“Even if a particular response or idea expressed is incorrect, students should be encouraged to speak out so that every student realizes that everyone is not always right, but needs an opportunity to express themselves.” (PT6, Reflective journal)

Secondly, academic engagement was another element in which pre-service teachers performed relatively well during their practice. Academic engagement occurs when students show enthusiasm for their tasks by taking the initiative to raise questions, contribute to group activities and help and support peers. One participant stressed by saying that:

“What concerns me is the motivation of my students and their desire to learn, what productive pedagogies changed; the participation of my students improved, and the students who did not participate at all, became more engaged because they had found much to talk about during class.” (PT7, Reflective journal)

In a similar manner another teacher described the personal effort and role in enabling the supportive classroom environment. As cited:

“That depends entirely on the teacher. A good teacher makes the classroom an environment where students can evolve socially.” (PT4, Reflective journal)

The pre-service teachers identified that students could express their opinion freely and obtained opportunities to collaboratively share their views and thoughts in productive and positive classroom environment. One participant mentioned that: “I can create supportive classroom environment to express students’ ideas freely in safe and comfortable environment with their colleagues. This caused their learning more achievable and memorable.”

This part summarizes regarding the pedagogical shifts of the pre-service teachers’ practicum practice concerned with the two dimensions of the productive pedagogies.

Research Question 2: What are the challenges that the pre-service teachers encountered while implementing productive pedagogies in their practicum?

To respond to this research question, focus group interview was conducted in order to explore the challenges faced by the pre-service teachers in the implementation of the productive pedagogies framework. For the analysis of focus-group data, summary-based reporting approach was used. Each focus group is composed of four participants according to their specialization: Group 1 is for Pure Science; Group 2 is for Pure Arts; and Arts and Science for Group 3. Accordingly, in the following section, four responses related to the two dimensions of productive pedagogies are provided using summary-based reporting approach.

Challenges Experienced by Pre-service Teachers in Implementing Intellectual Quality in their Classroom

With regard to this, in order to explore the challenges experienced by pre-service teachers in implementing intellectual quality in their classroom, the following guidelines for each focus group are utilized.

Question (1): In which component of the intellectual quality dimension did you encounter the challenges? Why?

Question (2): How would you transform the new ways of teaching related to intellectual quality dimension for further teaching?

The following table illustrates the summary responses related to intellectual quality obtained from all focus groups.

Table 2 Summary-Based Reporting Related to Intellectual Quality

Group	Question 1	Question 2
1	Metalanguage	Different contexts
2	Substantive conversation	More challenging activities
3	Time	Belief about teacher’s ability

With respect to metalanguage, from the data collected, the participating teachers had varied opinions on the implementation of metalanguage. Some were of the view metalanguage partially implemented, while others were of the view they were implemented.

“There was an improvement in almost all the elements of intellectual quality in my classroom. However, metalanguage was totally absent; though I feel there was no need for it in my lesson.” (PT2, focus group 1)

Interestingly, another participant had a better perspective of the concept of metalanguage. He argued:

“For me, I implemented all the elements of intellectual quality very well including the metalanguage..., since it is not only on difficult words..., it involves the definitions of terms..., re-emphasis on difficult words..., retreating to explain..., the concepts of axioms, theories, laws etc. are all metalanguage concepts. So, the metalanguage was there during classroom practice.” (PT5, focus group 2)

The interactions between the pre-service teachers on metalanguage provided that they did not really have agreement of the concept of metalanguage and its implementations. Therefore, these results indicate that, productive pedagogies may work in one environment and fail to work in other environments depending on the prevailing circumstances surrounding the environment and different context.

According to the participants’ responses of this study, the productive pedagogies framework influenced the pre-service teachers by challenging their views about their assumed learning theories. The pre-service teachers indicated that their views of learning and teaching had changed after studying and implementing the productive pedagogies framework. They commented that the framework could assist them achieve pedagogical shift.

One of the participants pointed out the change in her teaching towards student- centered approaches and said:

“Previously we did not pay enough attention to deepen higher levels of thinking among students and to consider that the student is the focus of our teaching. We started giving more interest to the role of the student to discover, explain and draw conclusions about some of the facts and ideas.” (PT12, focus group 3)

The another challenge to pre-service teachers’ ability related to intellectual quality elements was the fact that the principles of productive pedagogies need significant time to be applied in lessons which is last for only 45 minutes. One pre-service teacher mentioned that:

“Higher-order thinking activities take up so much time to prepare and apply, that I often run out of time. I just have 45 minutes for the class!” (PT7, Focus group 2)

Moreover, exchanging ideas and opinions during the class dialogue helped students to grasp the complex relationships between central ideas. One participant mentioned:

“The sustained discussion on today’s concepts which included exchanging the opinions with each other and using students’ examples and experiences meant the lesson became more understandable.” (PT1, focus group 1)

One interesting thing is the pre-teachers’ beliefs about their abilities in implementing productive pedagogies. One participant summarized his experience as follows:

“The main point is my weakness in English. I don’t dare to speak in English and I’m not used to speaking in English. And the students can understand me when I teach in Burmese. For these reasons, I teach only in Burmese. Next time, I’ll try to speak in English as much as I can.” (PT9, focus group 3)

Challenges Experienced by Pre-service Teachers in Implementing Supportive Classroom Environment in their Classroom

With respect to this, to explore the challenges experienced by pre-service teachers in implementing supportive classroom environment in their classroom, the following guidelines for each focus group are adopted.

Question (3): In which component of the supportive classroom environment dimension did you encounter the challenges? Why?

Question (4): How would you transform the new ways of teaching related to supportive classroom environment dimension for further teaching?

The summary responses related to supportive classroom environment revealed from all focus group are illustrated in the following table.

Table 3 Summary-Based Reporting Related to Supportive Classroom Environment

Group	Question 3	Question 4
1	Class control	Real school-based experiences
2	Time constraint	Use time wisely
3	Class size	Self-regulation

As can be seen from the above summary-based reporting, the responses related to supportive classroom environment revealed that pre-service teachers were better at producing a supportive classroom environment than they were at producing intellectual quality, connectedness, or recognition of difference. Pre-service teachers were more inclined to improve their learning environment by trying to support their students as a means of providing the best learning environment.

Endeavors to improve teaching needs to be spearheaded by greater sharing of control with students in the classroom and providing them with opportunities to negotiate and speak out. Pre-service teachers, to some extent, succeeded in creating the appropriate climate for students to raise questions and contribute to group activities. One participant stressed that:

“Working in pairs encouraged students to participate with their colleagues comfortably and show enthusiasm towards their tasks.” (PT4, Focus group 1)

Another pre-service teacher also highlighted as:

“With productive pedagogies I believe that knowledge must be expressed in various ways. I see us moving away from the traditional teaching methods and we are trying to introduce new student-centred interactions with the knowledge gained through discussion and a consensus being reached...In the end, students will have the correct information in an interactive learning environment which will ultimately help their learning.” (PT1, focus group 1)

From the views of the pre-service teachers, the use of productive pedagogies framework encouraged representative participation of students during classroom instruction and in decision making on how classroom activities are handled. One participant commented that:

“During class instruction, I made use of the students do most of the classroom activities. For example, the students are allowed to cite examples of daily activities like going to the markets to buy things. He also used two students working together to

describe how two lines could be parallel.... in short, the students were fully involved in his teaching. Students were relaxed to discuss their problems during the classroom instruction with us.” (PT11, focus group 3)

One of the pre-service teachers asserted the effect of large class size and said:

“Best application of productive pedagogies requires all students having opportunities to participate. However, following-up 35 students with different abilities and learning skills creates an extra burden for the teacher. Maybe if the class sizes were reduced to 15 that would be better.” (PT 10, focus group 3)

To sum up, as the pedagogical shifts, pre-service teachers’ practicum practice enhanced in all two dimensions of productive pedagogies by training with productive pedagogies. Among them, it can be concluded that pre-service teachers found it easiest to implement supportive classroom environment in the practicum in spite of the challenges such as metalanguage and hindrances and contextual factors (time and class size) are appeared during the practicum.

Discussion

The quality of the education system cannot exceed the quality of its teachers. In light of this focus, valuing the quality of pre-service teachers’ pedagogical practices to improve students’ outcomes has become a key consideration in reforming teacher education for the 21st century. The central premise of the successful application of productive pedagogies is that teachers consider backgrounds and students’ preferred learning styles, identify the repertoires of practice and operational fields to be targeted, evaluate their array of teaching strategies, and select and apply the appropriate ones. Therefore, this study was conducted to examine whether productive pedagogies enhance the pre-service teachers’ pedagogical practices. The three research objectives are laid down to achieve this purpose.

The first objective is to develop a training model for producing pre-service teachers’ practicum practice using productive pedagogies. Therefore, the proposed training model was firstly developed. It includes four phases: assessing pre-service teachers’ initial knowledge and skill, training with productive pedagogies, implementing productive pedagogies in practicum practice, and consolidating.

The second objective is to investigate how training with productive pedagogies enhances pre-service teachers’ practicum practice. An Effect matrix of Miles, Huberman, and Saldana (2014) was utilized to highlight the pedagogical shifts of the pre-service teachers’ pedagogical practices concerned with the two dimensions of the productive pedagogies: intellectual quality, and supportive classroom environment. Four main themes were appeared as the main strengths for implementing productive pedagogies by pre-service teachers in practicum practice: (a) improvement in pedagogical practices, (b) guiding teachers’ preparation, (c) valuable guide for teaching, and (d) engagement in professional development opportunities. The thematic interpretation map for the strengths of implementing productive pedagogies in practicum is provided as follows.

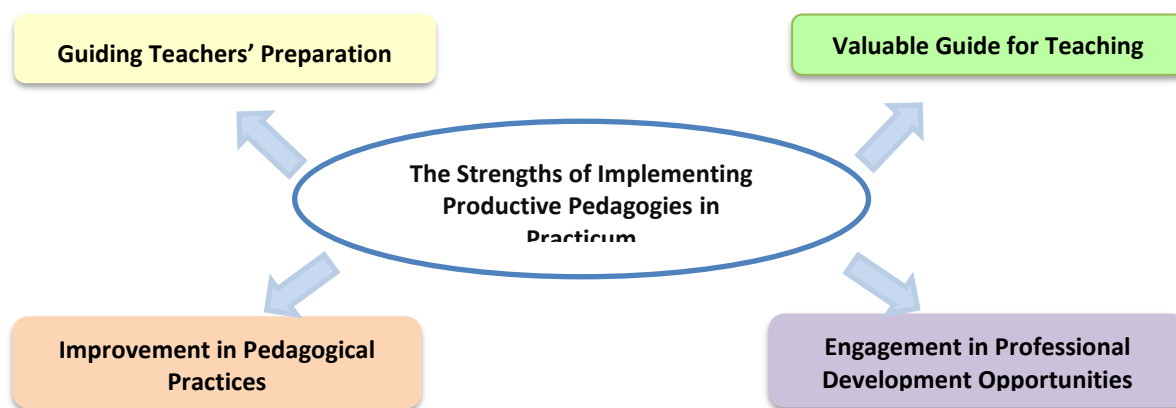


Figure 1 Thematic Interpretation Map for the Strengths of Implementing Productive Pedagogies in Practicum Practice

The third objective of this study is to find out the challenges faced by pre-service teachers in implementing productive pedagogies in their practicum. Based on the results of the summary-based report with regard to the challenges faced by pre-service teachers for implementing productive pedagogies in their practicum, metalanguage, time and class size are appeared as the main challenges for pre-service teachers.

The findings of this study showed that pre-service teachers' ability to implement productive pedagogies involved some challenges. Perhaps of the all dimensions of productive pedagogies, pre-service teachers in the study found that it is easiest to implement the supportive classroom environment dimension. This finding is in agreement with the study of Gore, Griffiths, and Ladwig (2004).

As mentioned above section related to metalanguage, pre-service teachers had different perspectives on implementation of metalanguage; some argued that it could omit from some of the lessons while some pointed out that it is necessary for their learning context. In this study, accordingly, the results from the pre-service teachers' focus group interviews showed that time, and class size are the hindrances and contextual influences that teachers faced for implementing productive pedagogies in their practicum. Figure 2 is the thematic interpretation map of the meanings indicated the challenges facing pre-service teachers in implementing productive pedagogies in their practicum.

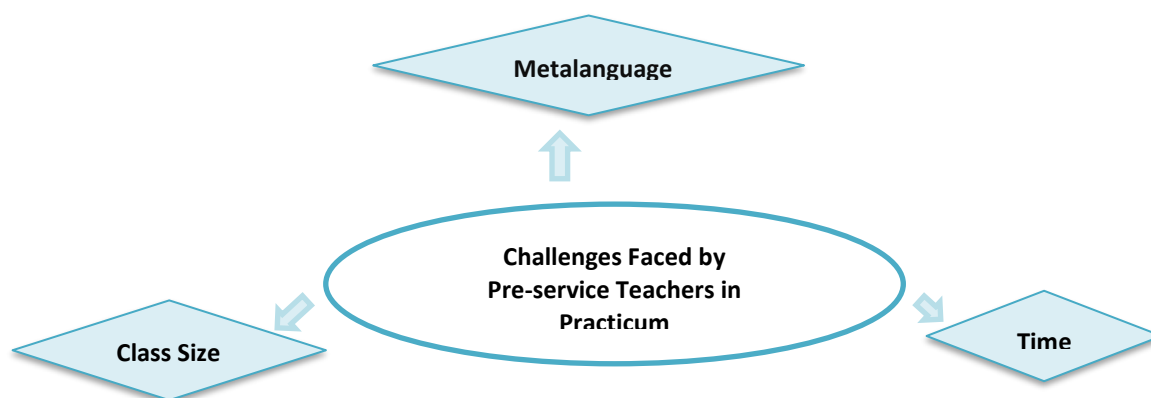


Figure 2 Thematic Interpretation Map for the Challenges Faced by Pre-service Teachers in Practicum

Suggestions

The overall findings of this study suggests interesting insights on pre-service teachers' needs and challenges to fill up the gap from their institution to school (theory into practice).

Firstly, for Myanmar teacher education program, an effective policy should be laid down for extending pedagogic internship or practicum component, buttressed by authentic mentor/instructor supervision, and solidly based on dynamic homeostasis. Since improving teacher performance is deemed crucial to improving student outcomes, an integrated teacher development programme, preferably under a separate department of teacher education, should be developed resulting in a viable strategy for supporting teachers or pedagogues throughout their pedagogic careers from selection to initial training to career development.

Secondly, in the structure of the teacher education system of institution, teaching practicum should be emphasized more and redesigned. Curriculum developers should consider giving more and more incorporation to utilize the theoretical concepts directly to practice teaching bridging the gap between theory and practice by taking into consideration the integration of the productive pedagogies for the pre-service teachers' practicum practice.

Thirdly, the institutional administrators should encourage the teacher educators to make more proficient and better collaboration with the practice schools for pre-service teachers' firsthand experiences and thus the strong coordination of the efforts to help their productive practice is indispensable to the stakeholders.

Fourthly, teacher educators should try to have the knowledge and skill to handle the changes to have a positive change in education as learning is itself an active process of change. They should cultivate pre-service teachers to have certain codes of pedagogic professional conduct and give thought and attention to how to better allow for the inclusion of productive pedagogies for all pre-service teachers.

Conclusion

Good teachers are made, not born; and, the making of a teacher is a complex process. Preparing pre-service teachers consistently throughout their preparation programs ensures a more vigorous transition to in-service teaching, creating a cadre of confident and effective educators for the pedagogically oriented society in the conceptual age.

Productive pedagogies framework provides background and some strategies around harnessing inner strength and developing a subsequent professional identity in order to pursue worthwhile, autonomous and transformative outcomes for practicum practice. Therefore, there is an urgent need to conduct a research dealing with the training with productive pedagogies for their pedagogical practices in their initial training.

According to the research question (1), the results of this study indicated that pre-service teachers' pedagogical practices enhanced when they applied productive pedagogies. Among the four dimensions of productive pedagogies, the pre-service teachers were better at producing supportive classroom environment than the other three dimensions. The strengths of implementing productive pedagogies by pre-service teachers in practicum practice have appeared as: (a) improvement in pedagogical practices (b) guiding teachers' preparation, (c) valuable guide for teaching and (d) engagement in professional development opportunities.

For the research question (2), while pre-service teachers expressed positive reactions towards introducing productive pedagogies in their pedagogical practices, they indicated some key challenges that they faced during their implementation. Time and class size emerged as challenges for implementing productive pedagogies in practicum. To overcome these challenges, all stakeholders such as curriculum developers, institutional administrators and teacher educators could reconsider to provide practicum experiences based on dynamic homeostasis, to adjust class size if possible, and promote pre-service teachers' abilities and other effective factors for achieving better practice of pre-service teachers in their practicum.

As a final conclusion, the researcher wishes to assert that, to be optimally successful, practicum practice procedures should be based upon extending pedagogic internship or the practicum component, buttressed by authentic mentor/instructor supervision, and solidly based on dynamic homeostasis. The researcher believes that these aforementioned pedagogic principles will result in increased effectiveness of the practicum, commendable for all teacher education arenas of the world, and as the universal strategy of global pedagogistics.

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