

Using the Art of Questioning as Classroom Assessment for Learning English in Pre-service Teaching

Lyzyl Lopez-Banuag

banuag.ll@pnu.edu.ph

Philippine Normal University - Mindanao Campus, Philippines

Abstract Practice teaching is a salient phase for students deployed in the real school settings while they pursue a degree from a Teacher Education Institution (TEI). This mixed-method research examined the types and levels of classroom questioning of pre-service teachers of elementary English in a TEI in Mindanao. It also explored their perceptions and practices in questioning anchored on Kolb's experiential learning theory. Through purposive sampling, 16 pre-service teachers taking-up Bachelor in English Education with certificate in teaching elementary participated in the study. Their actual classes were recorded and seven of them joined the 30-minute focus group discussion which was transcribed, translated, and analysed thematically. The identified questions were categorized according to the types of questions in classroom discourse and classified as to low and high levels through Bloom's Revised Taxonomy. Based on the findings, the types of questions were retrieval style and yes or no questions which belonged to low cognitive levels. The participants developed practices to mitigate the challenges of questioning as classroom assessment. A wider exploration to compare results with other pre-service programs in the focused TEI is recommended as the study had relevant implications to teacher development.

Keywords: *Art of questioning, assessment, classroom, English, pre-service teachers*

Introduction

The advent of worldwide frameworks such as globalization and the integration of Southeast Asian Nations (ASEAN) prompted institutions of higher learning to continually undertake reforms. Higher Education Institutions (HEIs) submit to several processes of educational developments to improve the quality of instruction. In the field of education, producing globally competent and innovative teachers and teacher educators is a challenge among Teacher Education Institutions (TEIs).

As the 21st century unfolded, drivers of change in education emerged on a larger scale. There was a high demand for adjustment and refinement of systems and programs for quality assurance and sustainable development. For one, the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2017) signified the importance of Sustainable Development Goal (SDG) 4 focused on ensuring quality education for all. This goal could be attained through fostering quality education for continual development anchored on the themes and domains of global citizenship, effective learning environments, and increased number of qualified teachers.

In addition, the recent adoption and implementation of the Philippine Professional Standards for Teachers (PPST) matched these transformative goals on teacher quality starting from pre-service education. Another catapulting force was the affiliation of the current TEI to the National Center for Teacher Education (NCTE) in the Philippines. These dynamic factors posed germane challenges to the research institution which envisioned to be an internationally recognized and nationally

responsive teacher education university specializing in multicultural education.

As the Center of Excellence in Teacher Education in the southern part of the country, one of its undertakings is to generate teacher-enhancement programs. Montebon (2015) stressed that pre-service teachers should be equipped with academic competencies and be prepared for their professional roles as teachers and education leaders through innovative programs. To ensure that these goals were met, the TEI operated a laboratory school dubbed as the Center for Teaching and Learning (CTL) where pre-service teachers are trained during their on campus teaching. The CTL exposed both practice teachers and pupils to the latest pedagogies making educational experiences more relevant to the status quo.

Research and exploration in the basic and higher education paved substantial implications to the teacher-training programs and practices of the TEI (Perines, 2021). Findings of the current investigation could improve the pre-service teachers' use of the art of questioning as classroom assessment for teaching and learning English in elementary classes. Consequently, supervising instructors who were mostly members of the Faculty of Teacher Development (FTD) could venture on integrating this strategy in select professional education courses.

On Pre-service Teaching

Practice teachers (collective term for pre-service teacher who are part of the on-the-job training) are expected to cooperate and learn about classroom teaching and learning processes from the cooperating teachers or supervising instructors (Lindström, Löfström, & Londén, 2022). Among the collaborative activities were lesson planning, preparing projects, and assessing student knowledge. Their academic

preparations along with the aforementioned field experiences (e.g., collaborative activities) equipped the students to become teacher professionals as postulated by Young and Knestrict (2012). In this early career stage, would-be-teachers form their professional identity in classroom management to teaching content and strategies. Anent to this, university experts should emphasize the impact of asking quality questions by providing the students the chance of mastering questioning techniques. Zhang and Patrick (2012) claimed that when teachers use their time asking high-grade questions, learners would become active participants in the lesson, exploring their own questions, and developing higher order thinking skills.

In the Philippines, the Department of Education (DepEd) and the Commission on Higher Education (CHED) manage the processes, development, and quality assurance of teacher education. The present pandemic brought by the COVID-19 triggered salient policies and guidelines on the deployment of pre-service teachers for field study and teaching internship. The office of the Undersecretary for Curriculum and Instruction (OUCI) of DepEd released memorandum number 447, series of 2021, to all school divisions in the country for the conduct of orientation on a joint memorandum order of CHED and DepEd on new normal policies and guidelines on the deployment of pre-service teachers for field study and teaching internship to ensure the continuity of teacher-training. It covered pre-service teachers taking experiential learning courses under CHED Memorandum Order (CMO) 30, s. 2004 titled Revised Policies and Standards for Undergraduate Teacher Education Curriculum.

The memorandum also emphasized experiential learning through various new normal learning modalities; developmental approach through activities, coaching and mentoring; and at par with the Learning Continuity Plan

(LCP) and Most Essential Learning Competencies (MELCs). TEIs and cooperating schools are advised to adhere to the requirements on Student Internship Program in the Philippines per CHED Memorandum Order (CMO) No. 104, series of 2017 and the Guidelines on the Required Health Standards in Basic Education Offices and School per DepEd Order No. 014, series of 2020. Modifications in the delivery of Teaching Internship and Field Study were encouraged among TEIs based on their context and available resources.

The Art of Classroom Questioning

Classroom questioning is an important method to create meaningful interactions in teaching and learning. It is a tool to meet the lesson objectives and motivate the mental activity and ingenuity of students. To examine the efficacy of the teaching process, teachers should have awareness of the quality of their questions during classes. Careful planning should be done concerning students' attention, teacher's voice, pause or the time given to students to think about the answers, and content of questions (Shanmugavelu, Ariffin, Vadivelu, Mahayudin, & Sundaram, 2020).

Extensive studies were documented on classroom questioning. For one, Sundh (2017) examined teacher questions in an English as a Foreign Language (EFL) classroom with a conversation analytic (CA) approach in Cambodia. The findings showed five categories of questions used by the teacher which include understanding checks, activity managing questions, repair regarding understanding and repair regarding accomplishment of task and lastly topic elaboration questions. Moreover, a qualitative study using interpretivist paradigm on problems met by pre-service teachers during their teaching practicum was conducted by Abongdia, Adu, and Foncha (2015). The findings reflected social practices which include exploring experiential knowledge, student centeredness, and language teaching.

In the Philippines, the use of a descriptive-correlational design in identifying the art of questioning of the faculty the College of Teacher Education of the University of Northern Philippines for School Year 2010-2011 was done by Bello (2013). The respondents were 18 faculty and 97 students of the university. The study revealed positive results as the teachers always asked interesting, thought-provoking, and challenging questions. They also used diverse techniques in questioning, gave positive and encouraging remarks, and encouraged students to regularly ask questions. Enhancement programs such as seminars and training- workshops were recommended.

Descriptive statistics examined the student-teachers' performance in questioning in the study of Dimalaluan, Peralta, Labaria, Del Castillo and Almerol (2016). The variables included quality of questions asked, techniques in questioning, handling students' answers and handling students' questions. Only the pre-service teachers enrolled in the first semester of school year 2015-2016 and 22 cooperating teachers were the respondents of the study. It was revealed that the student teachers' self-ratings and that of the cooperating teachers on the level of performance in the art of questioning was "very satisfactory".

In Northern Mindanao, Roble, and Bacabac (2016) identified the level of competence of pre-service teachers majoring in mathematics in a science and technology state university. Relevant findings implied that though the incoming mathematics teachers were proficient in their subject of expertise, they still lacked indispensable teaching skills. Designing an intensive professional development program for inclusion in the mathematics curriculum was highly recommended.

Additionally, Batugal (2020) conducted a study among 103 student-teachers in one university in the country.

It was found out that art of questioning was a weakness of pre-service teachers in handling students' class participation. Their choice and expression of words and ability in answering questions and in connecting the material in a deeper sense of the subjects, and techniques used in questioning pupils during assessment were not strong as reflected by the t-test. This result indicated that pre-service teachers needed training in the development of questioning strategies while others were not trained at all. As Cotton (1988) stipulated, there is a positive relationship between learner achievement and the training which teachers undergo to improve their skills in asking higher cognitive questions, varying their behaviors, and using relevant approaches in questioning. As a whole, it addressed specific issues and challenges faced by pre-service teachers during their professional exercise.

The preceding literature and studies exemplified the importance of the art of questioning in classroom discussions. It was also established that pre-service teachers met challenges in constructing and delivering questions. Hence, this study highlighted the types and levels of classroom questioning used by pre-service teachers of elementary English. It further documented the challenges they experienced and their proposed solutions to deal with difficulties in classroom questioning. Nonetheless, there is a need to equip would-be-teachers with skills and strategies for them to teach more effectively and have better experiences during their internship. Consequently, the dearth of studies on pre-service teaching in the present research locale necessitates this research as input to policy-making and development of the teacher education curriculum.

Framework of the Study

The study primarily identified the types and the levels of questioning employed by pre-service teachers in their

elementary English classes during their on campus training. This investigation was anchored on the concepts of Wajnryb (1992) who classified classroom discourse questions as yes or no questions, short answer or retrieval-style questions, open-ended questions, display questions, referential questions, and non-retrieval or imaginative questions. This enquiry was further moored on the revised cognitive domains of Krathwohl and Anderson (2009) which helped teachers ask challenging questions and model the development of increasingly complex thinking to direct the quality of student responses. Remembering, understanding, and applying were considered low order thinking skills while analyzing, evaluating, and creating were high order thinking skills.

Another framework used in this research was the experiential learning theory (Kolb, 2014). It viewed that experience was paramount to a person's learning and was a verified approach to teaching and learning processes. It strengthened another purpose of this research which was to find out the problems encountered by practice teachers as they formulate questions while teaching English to elementary pupils as well as the solutions they suggested to deal with these challenges. Findings of this examination implied ingenuities to improve the practice teaching program of the focused TEI.

Purposes of the Research

The study examined the types and the levels of questioning used by pre-service teachers of elementary English in the class along with the solutions they offered vis-à-vis the problems they encountered during their on campus teaching. Specifically, it sought to answer the following questions:

1. What types of questions and level of questioning do pre-service teachers use in teaching

- elementary English classes?
2. What were the perceptions of the pre-service teachers in crafting questions while delivering their lessons?
 3. What practices were employed by the participants to address the challenges met in their classroom practice teaching?

Methodology

Research Design

This study employed mixed methods design to address its purposes. The first objective was to identify the types of questions and level of questioning used by pre-service teachers in teaching elementary English classes. Frequencies, percentages, averages, and other statistical tools interpreted the results quantitatively. To add to the qualitative nature of the study which explored the perceptions and practices of the participants in crafting questions while delivering their lessons, a focus group discussion was conducted. Thematic analysis classified their perceptions and practices in constructing and using questions in the English classroom. Consequently, triangulation of findings was done through the observation of the video recording of actual classes, review of lesson plans, and transcriptions (Caruth, 2013; Creswell, 2009).

Participants

The study used purposive sampling of 16 students taking up Bachelor in English Education with certificate in teaching elementary; however, due to technical difficulties in saving the recorded classroom videos, only 11 pre-service teachers became the actual respondents. Table 1 shows that all pre-service teachers teaching Elementary English were females

and who were 20 to 21 years old. All of them were single during the conduct of the study.

Table 1.

Profile of Respondents

Code	Age	Sex	Civil Status	Grade Level Taught	Subject Matter
PST1	21	F	S	English 1	The Foolish Fish
					Articles: A and An
PST2	21	F	S	English 5	The Legend of the Pineapple
PST3	21	F	S	English 6	The Greedy Dog
					Elements of a Short Story
					Copular Verbs
PST4	21	F	S	English 4	The Green Kingdom
					Descriptive and Limiting Adjective
PST5	21	F	S	English 6	Passive and Active Verbs
PST6	20	F	S	English 3	Matter: Forms of Life in the Desert
					Simple Present Tense
PST7	21	F	S	English 2	Simple Future Tense
PST8	21	F	S	English 3	Pronouns
PST9	20	F	S	English 2	I am Joey
					I and Me correctly (Pronouns)
PST10	21	F	S	English 1	Win or Lose
					Rhyming Words
PST11	21	F	S	English 3	The Rain Song

The pre-service teachers taught different topics in English such as literary appreciation, reading comprehension, phonology, and grammar from grade one to grade six. Their supervising instructors (SIs) were the subject teachers or class advisers who were full time faculty members of the CTL. They religiously submitted their lesson plans to their for checking, comments, and suggestions. At the end of the day, a post conference in a form of FGD was conducted to discuss their practice teaching performance which included their strengths and weaknesses in handling a particular class.

Instruments

A survey questionnaire was developed by the researcher and validated by three experts in teacher education. It had a high individual item content validity index ranging from .50 to 1.00 and a good reliability index of .9 and .8. It was administered to the participants to gather profile information which included their name, age, sex, and civil status. Furthermore, a checklist was used to classify the types of questions gathered from the transcripts of the class sessions. The types questions in classroom discourse of Wajnryb (1992) comprised yes or no questions, short answer or retrieval-style questions, open-ended questions, display questions, referential questions, and non-retrieval or imaginative questions (Balqis, 2019).

In addition, the study made use of a modified question analysis form from Lewis (2014). The form contained the cognitive processes from low to higher levels like remembering, understanding, applying, analyzing, evaluating, and creating. Two tenured faculty were commissioned for the categorization and validation of the types of questions and the levels of questions. The lesson plans of the participants and transcriptions of their class sessions were used to ensure the reliability of data. Along with the survey questionnaire, the set of open-ended questions for the FGD on the perceptions and practices of the participants

in using questions as assessment for learning in their English classes was also constructed by the researcher and subjected to content validation with a moderate to high overall CVI of .63 to .91 and with an acceptable reliability index of .8 to .7. Questions asked in the FGD included the following: Why is questioning important in the classroom?; What is an effective question?; How many questions do teachers ask in a subject or a period?; How will you or how do you encourage students to participate in your class through questioning?; What questioning techniques do you use in asking questions?; What problem or challenges have you experienced when asking questions in the classroom?; and, What solution do you think you could suggest to improve questioning in the classroom? Responses to these questions were coded and analysed to suit the purpose of the present study.

Data Collection

The researcher conducted an orientation among the pre-service teachers during their on campus practice teaching in the Center for Teaching and Learning (CTL) in the university since the researcher is one of the supervising instructors (SIs). A letter was employed to inform and secure permission from the head of the CTL and the SIs about the study. The data were collected during the second term of the academic year 2018-2019.

Recording of actual practice teaching sessions were done during each pre-service teacher's specific schedule. The researcher used the hard copies of lesson plans checked by the SIs for cross referencing; however, some technical difficulties such as corruption of files occurred. Only 11 videos were documented and transcribed using the Jeffersonian method by two student assistants.

From the transcripts, the researcher gathered, tabulated, and sorted the different cognitive questions asked by the pre-service teachers. The questions were categorized

according to the types of questions of Wajnryb (1992). The same questions were then classified as low and high order levels using the cognitive domains of the revised Bloom's taxonomy. The expertise of two faculty handling Professional Education (ProfEd) and Bachelor in Early Childhood Education (BECED) courses were sought to validate the categorization of the questions.

Seven pre-service teachers participated in the FGD which lasted for 30 minutes. Two student assistants transcribed the videos. The transcripts were translated and arranged thematically to answer the current research questions. Consequently, an in-house review by the research committee of the university was conducted for the refinement of the study.

Data Analysis

Statistical tools analysed and interpreted the gathered information on the profiles of the participants and the initial results of the types and levels of questioning. Frequency count and percentage treated the acquired 280 questions validated by the expert faculty. In identifying the perceptions and practices of pre-service teachers in asking questions during their actual teaching, the FGD video recording was transcribed, translated, and coded. Thematic analysis documented and scrutinized dominant and recurring words, phrases, and statements formed from the responses of the pre-service teachers.

Ethical Consideration

The ethical treatment of the pre-service teachers has been a priority in all the phases of this enquiry. The researcher sought the respondents' consent by having them sign an Informed Consent Form. Consequently, the names of the students were coded for confidentiality. It was further guaranteed that

the findings of the study are for educational and research purposes only.

Results and Discussion

Types of Questions

To answer the first objective of this study, six types of questions based on the categorization of Wajnryb (1992) were employed: yes/no question, short-answer/retrieval-style, imaginative or non-retrieval question, display question, referential question, and open-ended question. Based on the findings in Table 2, pre-service teachers who taught English tend to ask short-answer or retrieval type questions as it comprised 166 (59.07%) questions which put pupils into dependent and passive learning environment. Examples of these questions from the transcriptions were as follows: “*Who is the author of the poem?*”; “*Who can enumerate the forms of life found in a desert?*”; and, “*Children what can you see on the board?*”. This type of question limited the capability of pupils to think using their high order thinking skills as they are quick to answer only what they have read, seen or listened to. Pre-service teachers resolve to ask Yes or No questions which comprised 35 (12.46%) examples: “*Would you like to live in the dessert?*”; “*Should we (you) be proud when we (you) win the game?*”; and, “*Do you wanna (want to) be like Tina?*”. This result could be rooted from the idea of Mikio (1989) in Qashoa (2013) that there is a tendency for a teacher to change a syntactic question type from "wh-" questions to yes or no when he or she feels that students encounter a difficulty in answering or understanding the wh-questions.

Open ended questions with 29 (10.32%) questions are likewise usually used by pre-service teachers. Sample questions of this type were as follows, “*What are examples of pronouns?*”; “*What name can you give to the pronoun he?*”;

and, “*What happened in the video?*”. Findings on the use of open-ended questions had relevance to the study of Çakır and Cengiz (2016) who also found out that teachers asked more open ended questions which resulted in more student participation. There was more dialogue between the teacher and the students. Hargreaves (1984) postulated that open-ended questions develop learners’ reasoning and judgment.

Table 2.

Types of Questions of Pre-service Teachers

Question Type	Number of Questions	Percentage %
Yes or No	35	12.46
Short-answer/ Retrieval Style	166	59.07
Open-ended questions	29	10.32
Display	25	8.90
Referential	12	4.27
Non-retrieval, imaginative	14	4.98
Total	280	100

Display questions comprised 25 (8.90%) of the 280 questions. Examples of this types of question were: “*When do we use simple present tense?*”; *How do you describe the character in the story?*; and, *What happened to the dog when he had seen (it saw) his (its) reflection in the water?*. The responses to questions were discussed by the teacher or were evident in the text read. Dashwood (2005) specified that display questions are typical of teacher-fronted lessons in which transmission of knowledge from teacher to student is the expected form of interaction.

Referential questions with (12 out of 280, 4.27%) is the least asked type of question in the study. Sample questions included: “*What lesson have you learned from the story?*”; “*Is it good to play tricks with other people? Why?*”; and, “*Andrea, what is your reason (for saying that you like it) every*

time it rains?” Per observation, this type of question elicited critical thinking among pupils, thus, only a few would share their ideas. As suggested by Morell (2007), a teacher’s use of referential questions in language classrooms can promote the opportunity for negotiation of meaning between the teacher and the learner. As Zhang (2018) highlighted, referential and open questions should be considered by teachers to improve the learners’ interest in active study and exploration.

Furthermore, there were only 14 (4.98%) non-retrieval or imaginative questions categorized in this study. Questions from the class include: *“How should you behave when we (you) win the game?”*; *“If there will be no green plants in the world, what do you think would happen?”*; and, *“Why should (we) befriend our foe or why should we be friends with our enemies?”*. Hamiloğlu and Temiz (2012) asserted that non-retrieval questions are significant in the early years of learners in school since they still manifest enthusiasm and willingness at the early stage of development. Imaginative questions stimulate learners to be attentive and interested on the specified topic, the teachers should expose them to different attention eliciting methods. While it is established that such questions are substantial in the learning process, pre-service teachers do not usually prefer to use them.

Levels of Questioning

Asking and answering questions is important in the teaching-learning process in any subject area. As reflected in Table 3, pre-service teachers teaching English dominantly asked low level questions of which skills on remembering comprised 189 (67.50 %) questions. Sample questions in this domain included: *“What are the elements of a short story?”*; *“What is the title of the poem?”*; and, *“What are (examples of) consonant letters?”*. Based on the revised taxonomy of Bloom (2001), remembering is the lowest thinking level which involve retrieving, recognizing, and recalling relevant

knowledge from long-term memory. Questions used by pre-service teachers begin with who, what, when, and where in which the answers were explicitly given in a story. Remembering as used in this study also refers to questions prompting information gap, True or False, and statement with either/or choices.

Table 3.

Levels of Questioning of Pre-service Teachers

Cognitive Domains	Number of Questions	Percentage %
Low Level		
Remember	189	67.50
Understand	53	18.93
Apply	13	4.64
High Level		
Analyze	14	5.00
Evaluate	8	2.86
Create	2	.71
Total	280	100

Another low level thinking skill used in questioning is understanding with 53 (18.93%) questions. It was concerned with the skills on constructing meaning from oral, written, and graphic messages. Some questions under this domain were: “*What are the words that have the same ending sound or rhyme words?*”; *What lesson have you learned from the story?*; and, “*What is the difference between (the pronouns) I and Me?*”. These kinds of questions prompted the development of particular skills such as making a summary of a story using their own words, restating the main idea of a story, explaining the roles of the characters, and describing a person or place.

As observed, pre-service teachers seldom use questions which elicit skills on applying with 13 (4.64%) questions only. Some of these included: “*How do you share your blessings to others?*”; *How (would you be able) to convert this into passive voice?*”; and, *What should you do when you lose (in) the game?*”. Skills developed in applying questions focused on carrying out or using a procedure with activities such as following unusual or alternative directions, using a different point of view in rewriting a story, or making an illustration of a story were seen to reflect this level of thinking.

Togfode, Elsner, and Haines (2013) asserted that based on classroom observation, teachers frequently ask low-level questions. They assumed that teachers lacked formal training in formulating high-level questions to encourage learning. Hence, questions classified according to levels create a hierarchy requiring students to answer with more intricate cognitive processes (Lewis, 2014).

Perceptions of Pre-service Teachers on the Use of the Art of Questioning

Since experience is the best teacher implied by the tenets of Kolb’s experiential learning theory, it is important to draw from the observations, opinions, and beliefs of the participants. In the FGD with seven pre-service teachers, it was clearly manifested that they were aware of the significance of the art of questioning. PST 12 posited that the art of questioning is important in the classroom in order to assess the students’ knowledge about a certain topic. PST3 mentioned that an effective question measures the students’ higher order thinking skills. As to the number of questions asked, PST7 claimed that there was no exact number of questions to ask the students since rephrasing and asking another question (probing) were necessary. Pre-service teachers were also aware of the challenges during this professional exercise (Abongdia, Adu, & Foncha, 2015). Two emerging themes

of problems met by pre-service teachers in asking questions during classroom discourse: giving feedback to students with incorrect and irrelevant answers and simplifying and making probing questions. Based on the thematization of the FGD transcripts, several themes emerged that describe the perception of pre-service teachers on the use of the art of questioning as discussed in the succeeding parts.

Giving feedback to students with incorrect and irrelevant answers. Lack of attention among pupils was a common scenario which may be due to a number of factors. It was indeed a challenge among pre-service teachers on how to address the learners when they could not give correct answers. Some pupils gave irrelevant responses to the teacher's questions. Thus, it added to the difficulties of the pre-service teachers in giving feedback to the pupils. One participant claimed that, it was evident that the teacher experienced a mixture of challenges in the elementary classroom setting.

I think one of the challenges that I faced in teaching English is the question who will answer the question because in the classroom there are many students and then not all of them are listening to you ask and then (#5) ... (FGDS16)

Simplifying and making probing questions. As per observation in the video recordings of classes, student-teachers had difficulty in rephrasing questions during classroom questioning. When pupils do not respond, the teacher was caught in rewording the questions in the lesson plan. This challenge in the English class was confirmed in the response of FGDS18.

One of the problems I faced during my teaching was that they don't know the answer to my question so my problem now is that what question I will give to them that I did not prepare in my lesson plans. (FGDS18)

Furthermore, pre-service teachers struggled in asking suitable questions to different grade levels of pupils. They were uncertain whether the questions they asked significantly measure the intended learning outcomes of the pupils or if these questions equate to their thinking skills. The art of questioning was seen as a weakness of pre-service teachers in handling students' class participation during assessment (Batugal, 2020).

Practices of Pre-service Teachers in Using Questions in Assessing for Learning

Through the three-month internship, the pre-service teachers developed ways and means to cope with problems in classroom questioning. These findings portrayed that the participants had practices to deal with the following problems: refining questioning skills and probing skills; preparing questions according to cognitive levels; asking questions that require high order thinking skills; contextualizing concepts; and, mastering the topic in the lesson plan and familiarizing the questions.

Refining questioning and probing skills. One participant (FGDS26) reflected that pre-service teachers were cognizant of the need to hone their probing skills in questioning. It was observed that most interns reinforce questions to help students think deeper and eventually come-up with the right answer. A strategy to back this solution was applying elaborative interrogation (Marzano, 2017). The pre-service teacher ask elaborative questions to probe a pupil's answer which would enable the pupils to reflect on the nature of and justifications for his or her answer. As Xu and He (2019) posited, learning to assess was considered the most significant and difficult task of pre-service teachers. Similarly, a participant claims:

Another is through probing which is one of the ways to improve your questioning skills and to make sure

that that that whenever you that when that what your first question was and then the second question you the students won't change your expected answer. (FGDS26)

Preparing questions according to cognitive levels. Pre-service teachers are aware of the need for assessing the thinking skills of pupils so that suitable questions could be generated as evident in the response of FGDS23. Questions should be varied to cater to the cognitive levels of pupils. While there were pupils who could give the correct answer right away, pre-service teachers took time to ask children who were not participative to check if they too understood the lesson. It was noted that they asked simpler questions such as "yes or no" which was followed by a "why or how" question. The strategy on reasoned inference questions (Marzano, 2017) could be a tool for this solution since the strategy draws from simple to complex thinking skills. The teacher asked for a premise or something that was known to be true or is assumed to be true from the pupils. This premise stimulated inferences which was a higher order thinking skill. As claimed by FGDS23:

And as for me, I think first you must diagnose your students as to their capacity in thinking so that the questions that you will be making next time will be suited for your learners because we are not actually only basing on our question we are also up to the time because we are only given a short time so we must make every question relevant and at the same time it must trigger the pupils' thinking skills. But they must be able to answer because of your strategies. (FGDS23)

Asking questions that require high order thinking skills. It is worthy to note that the pre-service teachers acknowledged the need for high level questions during assessment as claimed by FGDS25 below. As observed

during actual classes, when the pre-service teachers asked easy questions, most of the pupils would say or even shout the answer and still some would constantly call the attention of their teacher to be recognized. However, when questions that require inference, explanation, or sample situations were asked, very few to none would respond. As suggested by Hamiloğlu and Temiz (2012), there was a need for teachers to encourage learners to process higher levels of thinking. This could be done by asking challenging questions to arouse interest to the class. A strategy on elaboration of information focusing on general inferential questions (Marzano 2017) could be used to encourage students to reason and draw conclusions or make predictions about information.

For me, asking with HOTS that we call the higher ordering thinking skills, we must follow them when giving or asking questions with you students because sometimes when you ask easier questions their attention will be diverted because they know the answer, that's very easy—that question is very easy. So, their attention will not be focused on you. (FGDS25)

Contextualizing concepts. Pre-service teaching in the primary classes (grade one to grade three) was challenging for the interns since the pupils were more naïve and inquisitive at the same time. There was a need for the teacher to be more patient and even ask questions in a more creative manner. Pupils need more simplified and detailed questions before such could give an inference or an explanation such as during a literary appreciation topic. The notion that teachers should use a variety of questioning strategies in order to engage all learners in the classroom (Flaherty & Newman, 2012) was doable when questioning deals with contextualized concepts. Exposure to varied learning materials would improve the atmosphere

in learning and inspire students to participate better during class discussions (Hamiloğlu & Temiz, 2012). Participant FGDS30 accounts for these claims.

And if possible, use all the resources that can be found inside the classroom especially in asking questions because that is the fact that I am dealing with my grade 1 students, PUPILS rather and asking them is very difficult so you have to use your body language in order to communicate the question to them. (FGDS30)

Mastering the topic in the lesson plan and familiarizing the questions. Part of the training requirements for pre-service teachers were their lesson plans checked by their assigned SIs days prior to their actual classroom teaching. With the revisions and refinements, it was expected that the contents and processes of a particular subject matter, including questions during assessment, were familiarized and mastered for effective teaching. Pre-service teachers had difficulty in finding an activity that is appropriate regarding the students' learning level when they plan their lessons during their practice (Sahin-Taskin, 2017). It was evident to the response of FGDS26 that more effective questions can be developed during classroom discourse.

For me, I think one of the ways to improve the questioning is to make your lesson plan and master the lesson plan. In making the lesson plan of course you have included the questions and then make sure that the questions will be suited to the students' cognitive level. (FGDS26)

Conclusion and Recommendations

This study examined the types and levels of questioning employed by pre-service teachers of elementary English assigned in the Center for Teaching and Learning in a teacher education university in Mindanao. It also explored their perceptions and practices in questioning through Kolb's experiential learning theory. Results of this mixed-methods research were significant as baseline data for teacher-training programs and practices of TEIs. The data generated had practical implications to the use of the art of questioning as a classroom assessment strategy for teaching and learning English in elementary classes and its possible integration in select professional education courses.

The results gained from this enquiry revealed that pre-service teachers commonly asked low level types of questions which was detrimental in the teaching-learning process. Findings indicated that though they had awareness on classroom questioning, they acknowledged problems in their classes and shared different practices to address these issues. It was emphasized that on giving feedback to pupils with incorrect and irrelevant answers, teachers should simplify and make probing questions. It was commendable that the pre-service teachers were able to practice solutions to address the difficulties from their three-month experiences.

The results of this study had significant theoretical implications to language teaching and learning. They were similarly seen to be adapted in the field of professional teacher development such as revisiting and enhancing the roles of the supervising instructors in practice teaching, particularly in elementary English, to produce more competent educators. Individualized tutoring and peer debriefing could be practiced as they were effective in honing pre-service teachers' reflection, connection of theory to practice, and feedback on instructional methods. Emphasis on the formulation of

higher order thinking skills questioning techniques and other strategies on the art and science of questioning on the syllabus of the assessment coursework offered by TEIs is also suggested.

The main weakness of this enquiry was on the number of classes observed due to time constraints and few number of teaching loads the participants had. There were likewise technical difficulties during the gathering of data which caused some video recordings to be inaccessible. Since this study was a limited-scale research, future researchers may want to include a more improved enquiry on pre-service teacher observation and classroom exploration in other classes using more than one recording device to compare findings to the ones presented in this investigation and for a wider and broader scope of study.

Future directions of this research involved crafting an activity design on communicative skills training among pre-service teachers which would focus on the use of the art of questioning as classroom assessment for elementary English classes. The baseline data gathered were likewise seen as inputs to policy-making in the academe to contribute to the production of future-proof teachers. More related studies would be conducted to evaluate and improve practice teaching experiences and to contribute to the culture of inquiry in teacher-education.



References

- Abongdia, J. A., Adu, E. O., & Foncha, J. W. (2015). Pre-service teachers' challenges during teaching practice in one university in the Eastern Cape, South Africa. *International Journal of Educational Sciences*, 11(1), 50-56.

- Balqis, N. (2019). An exploration of teachers' questioning strategies in EFL classroom. core.ac.uk
- Batugal, M. L. C. (2020). Triumphs and trials: Probing the pre-service teachers' practice teaching experiences. *Universal Journal of Educational Research*, 8(7), 2864-2870.
- Bello, P. A. (2013). The art of questioning of the faculty in the college of teacher education in the University of Northern Philippines. *UNP Research Journal*, 22(1). Retrieved from <http://ejournals.ph/form/cite.php?id=7009>
- Bloom, Benjamin S. (ed.) (1956). *Taxonomy of educational objectives: Cognitive domain*. New York: David McKay Company, Inc
- Çakır, H., & Cengiz, Ö. (2016). The use of open ended versus closed ended questions in Turkish classrooms. *Open Journal of Modern Linguistics*, 6(02), 60.
- Caruth, G. D. (2013). Demystifying mixed methods research design: A review of the literature. *Melvana International Journal of Education*, 3(2), 112-122
- Cecil, N. L., & Pfeifer, J. (2011). *The art of inquiry: Questioning strategies for K-6 classrooms*. Portage & Main Press.
- DepED (2021). Orientation of the Joint CHED-DepEd Memorandum Order on New Normal Policies and Guidelines on the Deployment of Pre-service Teachers for Field Study and Teaching Internship for AY 2020-2021. Office of the Undersecretary for Curriculum and Instruction, No. 447.
- DepEd (2017). Philippine Professional Standards for Teachers. Retrieved from <https://www.deped.gov.ph/>

wp-content/uploads/2017/08/DO_s2017_042-1.pdf
on October, 2021

- Cotton, K. (1988). Classroom questioning. *School Improvement Research Series*, 5, 1-22.
- Creswell, J. (2009). Editorial: Mapping the field of mixed methods research. *Journal of Mixed Methods Research*, 3(2), 95-108.
- Dashwood, A. (2005). Alternatives to questioning: teacher role in classroom discussion. *Asian EFL Journal*, 7(4), 144-165.
- Dimalaluan, A. B., Peralta, M. D., Labaria, J. J. C., Del Castillo, J. R. A., & Almerol, E. R. (2016). The performance of WPU-Quezon pre-service teachers in the art of questioning.
- Donald, K., & Eggen, P. D. (1989). *Learning and teaching: Research based-methods*. Allyn and Bacon.
- Flaherty, S., & Newman, L. 2012. Questioning strategies to engage all learners. *Expeditionary Learning*, pp. 1-2.
- Hamiloğlu, K., & Temiz, G. (2012). The impact of teacher questions on student learning in EFL. *Journal of Educational and Instructional Studies in the World*, 2(2), 1-8.
- Hargreaves, A. (1984). Experience counts, theory doesn't: How teachers talk about their work. *Sociology of education*, 244-254.
- Khorsand, N. (2009). Cognitive levels of questions used by Iranian EFL teachers in advanced reading comprehension tests. Online Submission.
- Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. FT press.

- Krathwohl, D. R. (2002). A revision of Bloom's Taxonomy: An overview. *Theory into Practice*, 41(4), 212–218. doi:10.1207/s15430421tip4104_2
- Krathwohl, D. R., & Anderson, L. W. (2009). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Longman.
- Levin, T., & Long, R. (1981). *Effective Instruction*. Association for Supervision and Curriculum Development.
- Lewis, K. G. (2014). Developing questioning skills. Section 5 Improving Specific Teaching Techniques. Texas: Center for Teaching Effectiveness. <http://cms.binus.edu/DataSource/Resource/2009120411134124300000000/QS.pdf>. Accessed, 9.
- Lindström, L., Löfström, E., & Londén, M. (2022). Supervising teachers' orientations and conceptions about content and process in teaching practice. *Educational Studies*, 1-18.
- Marzano, R. (2017). *The new art and science of teaching*. Bloomington: Solution Tree Press.
- Mikio, K. (1989). Question-answering behavior in ELT classrooms. Washington. George Town University.
- Montebon, D. R. (2015). Student teaching enhancement program (step) and preservice teachers' teaching efficacy in science. *Journal of Computer and Education Research*, 3(5), 1-17.
- Morell, T. (2007). What enhances EFL students' participation in lecture discourse? Student, lecturer and discourse perspectives. *Journal of English for Academic Purposes*, 6(3), 222-237.

- Murphy Odo, D. (2016). An investigation of the development of pre-service teacher assessment literacy through individualized tutoring and peer debriefing. *Journal of Inquiry and Action in Education*, 7(2), 2.
- Perines, H. (2021). Educational research training in teacher training programs: The views of future teachers. *International Education Studies*, 14(1), 76-85.
- Qashoa, S. H. (2013). Effects of teacher question types and syntactic structures on EFL classroom interaction. *The International Journal of Social Sciences*, 7(1), 52-62.
- Richards, J., & Lockhart, C. (1996). *Reflective teaching in second language classrooms*. Cambridge: Cambridge University Press.
- Roble, D., & Bacabac, M. (2016). Teaching proficiency and preparedness of pre-service secondary mathematics teachers: Its implications to actual practice. *American Journal of Educational Research*, 4(16), 1184-1190.
- Sahin-Taskin, C. (2017). Exploring pre-service teachers' perceptions of lesson planning in primary education. *Journal of Education and Practice*, 8(12), 57-63.
- Seman, S. C., Yusoff, W. M. W., & Embong, R. (2017). Teachers challenges in teaching and learning for higher order thinking skills (HOTS) in primary school. *International Journal of Asian Social Science*, 7(7), 534-545.
- Sundh, L. (2017). The function of teacher questions in EFL classroom activities in Cambodia: A conversation analytic study.

- Shanmugavelu, G., Ariffin, K., Vadivelu, M., Mahayudin, Z., & Sundaram, M. A. R. (2020). Questioning techniques and teachers' role in the classroom. *Shanlax International Journal of Education*, 8(4), 45-49.
- Tofade, T., Elsner, J., & Haines, S. T. (2013). Best practice strategies for effective use of questions as a teaching tool. *American Journal of Pharmaceutical Education*, 77(7).
- UNESCO (2017). Ensure quality education for all: Sustainable Development Goal 4; ten targets. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000259784> on April 28, 2022.
- Wajnryb, R. (1992). Classroom observation tasks. Cambridge University Press.
- Xu, Y., & He, L. (2019). How pre-service teachers' conceptions of assessment change over practicum: Implications for teacher assessment literacy. *Frontiers in Education* (p. 145).
- Yang, X. (2020). The art of questioning in English classroom in junior middle school. *Journal of Language Teaching and Research*, 11(5), 836-840.
- Young, T., & Knestrict, T. (2012). Preparing better teachers: Using collaboration in pre-service education. *New Horizons for Learning*, 10(1).
- Zhang, M. (2018). Collaborative writing in the EFL classroom: The effects of L1 and L2 use. *System*, 76, 1-12.
- Zhang, Y., & Patrick, P. (2012). Introducing questioning techniques to pre-service teachers. *Journal of Teacher Education and Educators*, 1(2), 159-184.