

Effectiveness of Mother Tongue-Based Multilingual (MTB-MLE) Special Program in Enhancing the Competence of Pre-service Teachers

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Abstract

Mother Tongue-Based Multilingual Education (MTB-MLE), a feature of the K-12 Program in the Philippines requires the Teacher Training Institutions to provide adequate and relevant MTB-MLE pre-service training to teacher-students. This quasi-experimental study using a pre-test-post-test design conducted with two groups of fourth-year BEED students at Bicol University during the school year 2014-2015. The study investigated effectiveness of the Special MTB-MLE Program in upgrading the level of awareness of the Teacher Training Institutions on MTB-MLE policies and issues, literacy level, and pedagogical competence, and documented the good practice options for the mainstream of the Teacher Education Program. Data were obtained from (1) the pre-test and post-test results, (2) class observations of the pre-service teachers, (3) questionnaires, (4) student outputs such as lesson plans and sample translations into Bikol as the subjects' mother tongue, and (5) focus group discussions and interviews with officials, faculty and students. The obtained findings show that the level of awareness on MTB-MLE policies and issues, literacy level, and pedagogical competence were significantly enhanced. The student-participants, experts/ practitioners and the teacher education faculty asserted that the training program and the materials used were highly relevant, useful and informative. Particularly, the student-participants were positive to the training program in substantially preparing them for pre-service teaching. Good practices along partnership with various stakeholders were characterized as collaborative and proactive; instructional strategies were interactive, involving the use of relevant technology-supported materials. In addition, assessment practices were reported as adequate, competency-aligned and combining both conventional and authentic assessment tools. The MTB-MLE Special Program was supported and recommended by the participating subjects as effective in preparing them for a career in education.

Keywords: *Mother Tongue-Based Multilingual (MTB-MLE) Special Program, competence of pre-service teachers, teacher education training program, mother tongue instruction, curricular alignment*

1. Introduction

With a multilingual context, the Philippines through the Department of Education deemed it essential to adopt a Mother Tongue-Based Multilingual Education (MTB-MLE) (Department of Education Order No.74, s2009). Although in the past, the Philippine educational system adopted the Bilingual Policy of Education, and the 1987 Philippine Constitution provides the use of the vernaculars as auxiliary languages, this MTB-MLE is an

important feature of the Enhanced Basic Education Program of K-12 which was implemented since 2012 (Republic Act 10533). This adoption of the MTB-MLE in the country is a response to the international initiative of promoting the use of the mother tongue for educational purposes (UNESCO, 2003) and respect for linguistic rights (UNESCO, 1992). Similarly, this is a formal effort to address the issue on literacy of Filipinos and to recognize the benefits of MLE. Based on the 2003 Functional Literacy, Education and Mass Media Survey (FLEMMS), out of 57.59 million Filipinos aged 10 to 64 years old, there were: 5.24 million Filipinos who could not read and write; 7.83 million Filipinos who could not read, write, and compute; and 18.37 million Filipinos who could not read, write, compute and comprehend (Nolasco, n.d; Ocampo et al, 2012). In the Lubuagan experiment, Walter & Dekker (2011) presented evidences that the use of the primary language of instruction is not compromising children in learning the second language, and enhances the mastery of curricular content in the more critical areas of math and science.

In the light of the implementation of the K-12 Program, the Teacher Training Institutions (TEIs) like Bicol University need to ensure that the Teacher Education Program is responsive to the changes and challenges brought by this curricular reform. The current teacher education curriculum (Commission of Higher Education Memorandum Order No. 30, s2004) is not designed to adequately prepare pre-service teachers for the MTB-MLE implementation since this program was crafted prior to the enactment of the K-12 Program. Therefore, appropriate curricular innovation should be initiated in order to address the identified gap in the teacher education curriculum since literature has confirmed the impact of the teacher factor on the learning achievement. The teacher's knowledge is long associated with effective schools in developing countries (Levine, 2006), therefore improving the quality or effectiveness of teachers will support achievement of students (Sanders & Rivers, 1996; Wright, Horn & Sanders, 1997; Rockoff, 2004). With teachers having sustained their cumulative effect on student learning, (Darling-Hammond, Chung Wei & Johnson, 2009; Hightower, Delgado, Lloyd, Wittenstein, Sellers & Swanson, 2011), TEIs need to strengthen their pre-service training among others that deliver responsive curriculum.

Since teachers have their crucial role in translating and shaping curricular goals and theoretical notions into effective classroom and school-wide practices (Broad & Evans, 2006), it is of prime importance to enrich or innovate the current teacher education curriculum in order to bridge the gap between the contents of the current Teacher Education Curriculum and the actual needs of prospective teachers as demanded by the K-12 Program implementation. In such a context, the researchers in this study felt the urgent need to address the existing gaps, as pertaining to the MTB-MLE implementation at the Kindergarten and the Primary levels for the country's basic education.

Theoretical Framework

A curriculum needs to be reviewed and revised or enhanced in order to be aligned with the demands of the teacher employment context. Essentially, this is an issue on responsiveness of the academic program. According to Bird, Forsyth & Whitton (2012), a 'responsive curriculum' consists of two components: (1) the ability to identify that a change is needed; and (2) the ability to make that change in an appropriate time scale in the context

of “responsiveness” as the ability to recognize change drivers, and to make changes in a timely manner. Bird, Forsyth & Whitton (2012) assert further that in developing a responsive curriculum, there is an interaction among three components of the model: *the drivers* (things that bring about the need for change); *the course elements* (things that can be changed); and *the course team* (the agents that mediate change). Below is Bird, Forsyth & Whitton’s paradigm of defining a responsive curriculum adopted by this study.

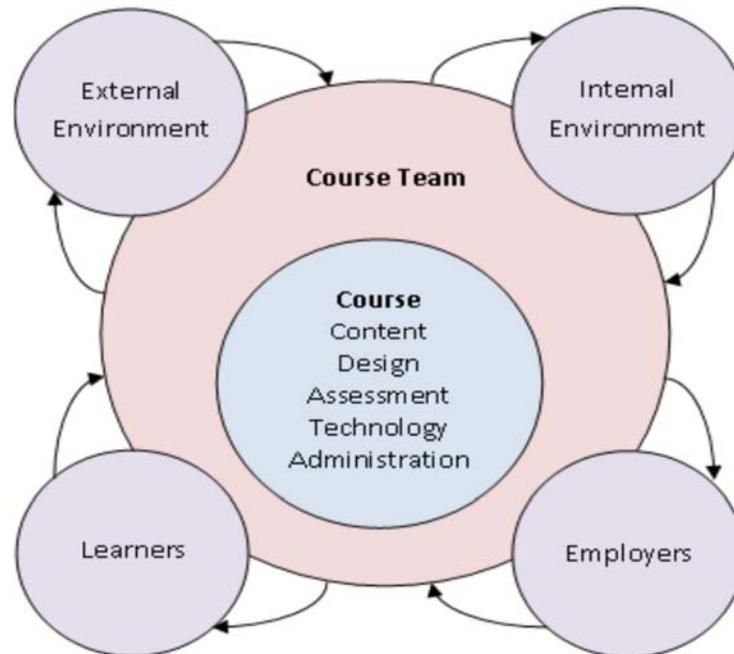


Figure 1: Defining a ‘responsive curriculum’ (Bird, Forsyth & Whitton, 2012)

Based on Bird, Forsyth & Whitton’s model, *the change drivers* include the external environment, including economic factors and changes in regulations and government policy; the internal environment, including changes in policy and systems, and other university departments, particularly quality assurance; the learners; and employers and regulatory bodies. Secondly, *the course elements* contain five areas that can be subject to change: (1) the content of the course (what is being taught?), (2) the design of the course, including elements such as pedagogic design, delivery and support (how is the course taught?), (3) Assessment, (4) Technology, and (5) Administration, including systems and procedures. Lastly, *the course team* referring to change agents, represents the core of this model. These change agents are responsible for designing, delivering and supporting the course. They include academic, support, technical and administrative staff responsible for both identifying the need for change through interaction with the drivers, and affecting change through interaction within the course.

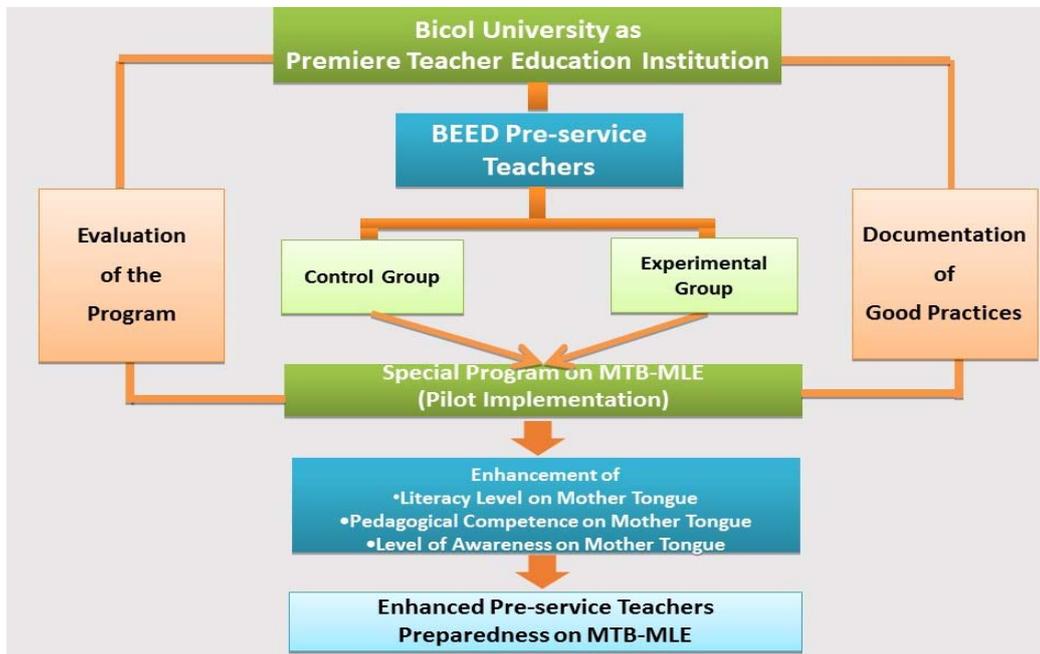


Figure 2: Conceptual Paradigm

[EDIT Figure 2 in two windows in the following order: Level of Mother Tongue Awareness Literacy Level of Mother Tongue Preparation for MTB-MLE]

In this study, *the external environment* includes the implementation of the educational laws and policies in the Philippines, such as the Republic Act 10533 also known as the K-12 Program, and Department of Education Order No. 74, series 2009 dealing on the implementation of MTB-MLE, and Department of Education Order No. 31, series 2013 dealing with the mother tongue as a medium of instruction. *The internal environment* refers to the institutional quality policy of the University which provides that “the University continually strives for excellence in instruction....”

The subjects participating in this research were pre-service teachers in the Bachelor’s degree Program in Elementary Education offered at the Bicol University Main Campus. The course elements for the MTB-MLE Special Program for Pre-service Teachers included all the five areas: (1) the content of the course, (2) the design of the course, (3) assessment, (4) technology to be utilized, and (5) administration, including systems and procedures observed both in the development, implementation and evaluation phase of the MTB-MLE Special Program. The change agents in this study were the concerned officials and the faculty of the Department of Education, of the university and the college as the major employer of the BEED graduates.

2. Research Objectives

This paper reports the implementation and assessment of effectiveness of the MTB-MLE Special Program for Pre-service Teachers at Bicol University. The Special Program is an innovation in the current Teacher Education curriculum in the Philippines.

There were two major research objectives in the study:

1. To investigate effectiveness of the implementation of the MTB-MLE Special Program in upgrading (1) the level of awareness of the Teacher Training Institutions on MTB-MLE policies and issues, (2) literacy level in the mother tongue (Vernacular Bikol), specifically translation skills from English to Bikol, and (3) pedagogical competence in using the mother tongue as a medium of instruction.

2. Identify good practice options for the mainstream of MTB-MLE Special Program in the Teacher Education Curriculum in three areas: (1) Roles of different stakeholders (2) Instructional strategies, and (3) Assessment practices.

3. Research Methodology

This study used a descriptive-evaluative method of research to describe the results of the implementation of the program and to discuss the identified good practices in the program regarding its design, development and delivery. It also used a quasi-experimental design with a control group and an experimental group to evaluate effectiveness of the Special Program in enhancing competence of the pre-service students in three areas (1) their level of awareness on MTB-MLE policies, framework and issues, (2) their literacy level in the vernaculars (*Bikol*), specifically their translation skills from English to Bikol, and (3) their pedagogical competence specifically in lesson planning in the mother tongue as well as a medium of instruction in other subjects.

3.1 The Subjects

The subjects participated in the study on the voluntary basis. They were 89 fourth-year students taking the Bachelor's degree Program in Elementary Education (BEED) in the first semester of the school year 2014-2015. The students were from pre-contained classes consisting of 44 students for the experimental group and 45 students for the control group. It was noted that for the purposes of comparing the pre-test and post-test results, only the students who completed the tests on the administration dates of the assessments tools were included in the computation. Therefore, the final number of subjects in the experimental and control groups were: 40 and 37 after Training 1, 42 and 30 after Training 2, and 33 and 38 after Training 3, respectively.

There were also voluntary experts from Bicol University and from the Department of Education as validators for the program materials in the drafting and revising stages for the final version of the materials to be used in the MTB-MLE Special Program.

3.2 Research Instruments

There were five research instruments:

1. the researcher-made pre-tests and post-tests validated in translation regarding the use of phrases, sentences and paragraph;

2. a questionnaire on a five-point scale on the MTB-MLE policies, framework and issues;

3. a rubric for assessing student outputs as lesson plans containing objectives, opener/motivation, strategies, procedures, and assessment, and sample translations into Bikol in the lesson plan outputs created by the students;

4. a class observation scheme of the pre-service teachers; and
5. a set of questions to prompt focus group discussions and interviews with officials, the faculty and the participating student-subjects.

The researchers piloted the research instruments with a voluntary group of third-year BEED students for clarity of contents and instructions. The instruments were revised for their final version on the basis of the obtained feedback from the third-year BEED students.

4. Data Collection

Data on the implementation of the MTB-MLE Special Program were collected from the participating subjects at Bicol University College of Education in the first semester of the school year 2014-2015. A document analysis of official documents and reports was first carried out, followed by interviews with officials, facilitators and pre-service teachers, cooperating teachers and principals of cooperating schools. The researcher then conducted focus group discussion with randomly selected students from both the experimental and control groups.

Quantitative data on the pre-test and post-test results were obtained from (1) translation of texts, (2) lesson planning through lesson plan outputs, and (3) MTB-MLE policies, framework and issues.

Qualitative data were gathered from the teaching observation results in the practicum of the participating student-subjects in three phases: pre-training, mid-training and post-training phases in the implementation of the MTB-MLE Special Program. Qualitative data were also obtained from the results of focus group discussions of pre-service teachers from both the experimental and control groups, as well as interviews with observed pre-service teachers, teachers and principals concerned regarding their cooperation in implementing the MTB-MLE policies, framework and issues.

5. Data Analysis

Descriptive statistics in frequency count, average and weighted mean were used to report the pre-test and post-test results. T-test was used to determine the significance of the difference between the pre-test and the post-test results. Microsoft EXCEL 2013 was used for statistical computations. Content analyses of qualitative data were to secure a conclusion on observation results, comments, suggestions and other feedbacks from the key voluntary informants in support of the quantitative results.

6. Results and Discussion

There were two major research objectives in the study:

1. To investigate effectiveness of the implementation of the MTB-MLE Special Program in upgrading (1) the level of awareness of the Teacher Training Institutions on MTB-MLE policies and issues, (2) literacy level in the Mother Tongue (Vernacular Bikol), specifically translation skills from English to Bikol, and (3) pedagogical competence in using mother tongue as medium of instruction.

2. Identify good practice options for the mainstream of MTB-MLE Special Program in the Teacher Education Curriculum in three areas: (1) Roles of different stakeholders (2) Instructional strategies, and (3) Assessment practices

This section briefly reports the implementation of MTB-MLE Special Program, followed by upgraded actions on (1) the level of awareness of the Teacher Training Institutions on MTB-MLE policies and issues, (2) literacy level in the mother tongue (Vernacular Bikol), specifically translation skills from English to Bikol, and (3) pedagogical competence in using the mother tongue as a medium of instruction. The last part of this section describes good practice options for the mainstream of MTB-MLE Special Program in the Teacher Education Curriculum in three areas: (1) Roles of different stakeholders, (2) Instructional strategies, and (3) Assessment practices.

6.1 The Implementation of the Special Program on MTB-MLE

The implementation of the MTB-MLE Special Program was based on the pre-training preparations up to the post-training assessment for pre-service teachers in Grades 1 to 3 in the provinces of Albay and Sorsogon. The university and college officials, partners or stakeholders from the Department of Education participated in the implementation of the MTB-MLE Special Program.

Pre-Training Preparations: The MTB-MLE Special Program for Pre-service Teachers was designed and developed on the basis of *needs analysis*, an essential part of a curriculum design and development, after Kirkgoz (2009). The researchers reviewed the Teacher Education curriculum for the school years 2011-2014 as an initiative taken by Bicol University. The University conducted focus group discussions with officials and personnel of four units, namely Sentrong Wika, College of Arts and Letter, BUCE Integrated Laboratory School, Language Center, and College of Education, followed by an analysis of documents or institutional reports of these units.

Needs analysis was meant to assess the pre-service teachers' awareness level of the MTB-MLE policies, framework and issues, their literacy level in the vernacular language, and their pedagogical competence in the mother tongue as a medium of instruction in assigned subjects (UNESCO, 1992, 2003; Walter & Dekker, 2011). The researchers used the translated texts and lesson plan outputs validated by voluntary practitioners and experts in the Special Program.

Design and Development of the MTB-MLE Program Curriculum Guide and Materials: The MTB-MLE Program Curriculum Guide was designed as an output of the MTB-MLE Seminar-writeshop on MTB-MLE organized by the researchers on May 6-8, 2014 at Bicol University. Peer critiquing was to refine and improve the output. The revised output was content-validated by three MTB-MLE experts and teacher-educators. The third and final version of the curriculum guide served as the basis for the design and development of materials for the MTB-MLE Special Program.

The MTB-MLE training materials consisted of MTB-MLE Information Brief, MTB-MLE Translation Guide and MTB-MLE Lesson Planning Guide. Each of these materials was designed and developed by the researchers with assistance from voluntary experts and practitioners to address the three areas: pre-service teachers' understanding of the MTB-MLE Framework, Policies and Issues related to translating skills and pedagogical skills. The MTB-MLE Information Brief includes discussion on the MTB-MLE framework, and the basic concepts related to language use and multilingualism, legal bases, some research findings on the mother tongue and multilingualism. The MTB-MLE Translation Guide provides discussion of the basic concepts and guidelines on translation, pointers for translations, Filipino and Bikol translation of the Bloom's Taxonomy of Behavioral Objectives (cited in Oakes and Lipton, 2003), and sample literary and informational texts in English and Filipino with Bikol translations. The MTB-MLE Lesson Planning Guide contains guidelines in lesson planning in the mother tongue, tips on lesson planning in other subjects using the mother tongue as a medium of instruction, articles on the Two-track Approach in teaching children how to read and write their first language, and sample lesson plans in the mother tongue for Grade 1: *Araling Panlipunan* for Grade 1 and Mathematics for Grade 3. The materials were revised collaboratively between the researchers and the voluntary experts three to five times to ensure an informative, relevant, useful and comprehensive material.

Training: The MTB-MLE Program for Pre-service Teacher was delivered in a training series of 8, 24 and 24 hours, respectively. The training program included an overview of the training, pre-test, distribution of materials, training activities in lecture-presentations and discussion by MTB-MLE experts from the Department of Education, open forum and students' group or individual activities, submissions of required outputs, sharing of impressions, securing feedback form, followed by post-tests before the Closing Ceremony where the student-participants were given the certificates of completion.

The training series included a clearinghouse where the researchers solicited feedbacks from the student-participants in their training series and the open forum on writing materials. Assessments on the student-participants' level of awareness, translation skills and pedagogical competence through lesson planning were conducted on three separate dates due to availability of the students.

Post Training Activity: The student-participants in the training series were followed up during their teaching practice through class observations, interview with the pre-service teachers and cooperating teachers, followed by focus group discussions after completing the practicum. Lesson plans for the lessons delivered during the observation time were collected as outputs of the students. Class observations were done by three faculty members from the College of Education, Bicol University. Class observations were conducted in December 2014 to February 2015 in the following schools: (1) BUCEILS, December 3-5 and 9-11, 2014; (2) Albay Central School, January 19, 2015; (3) Cabañgan Elementary School, January 22, 2015; (4) Bagumbayan Elementary School, January 23, 2015; (5) Camalig North Central School, January 27, 2015; (6) Rawis Elementary School, January 29, 2015; (7) Daraga North Central School, February 4, 2015; (8) Donsol East Central School, February 17, 2015; and (9) Guinobatan East Central School, February 18, 2015.

The researchers claimed the dynamics of the MTB-MLE Program for Pre-service teachers in the following innovative aspects: (1) K-12 and MTB-MLE-aligned (Bird, Forsyth &Whitton,2012), (2) Needs-based (Kirkgoz, 2009), (3) interactive and technology-supported, and appropriate to the learners in a non-threatening learning environment, (4) validated materials, (5) assessment combining conventional and authentic assessment tools, (6) internal coordination of stakeholders, and (7) involved partnership with the Department of Education. The researchers asserted that the MTB-MLE Special Program was an innovation in that the current Teacher Education curriculum be aligned with the Teacher Education Program of Bicol University College of Education; such alignment thus has brought changes to teaching practices with the use of the mother tongue in the K-12 Program (Bercasio, Llenaresas & Cabrillas, 2014). The training series has provided what the pre-service students need for the implementation of MTB-MLE Special Program in terms of understanding the MTB-MLE policies, framework and issues, translating texts from English and Filipino to Bikol, and planning lessons in the mother tongue.

6.2 Effectiveness of the MTB-MLE Program for Pre-service Teachers

The effectiveness of the MTB-MLE Special Program for pre-service teachers in terms of upgraded understanding or performance was assessed by the pre-tests and post-tests, observation of the randomly selected students, and feedback from different stakeholders involved in the program.

1. Level of Awareness of MTB-MLE Policies, Framework and Issues

The level of awareness of the students in the experimental and control groups was significantly enhanced as shown in Table 1. The students were aware of the MTB-MLE policies, framework and issues. The control group students, though not participating in the training program, showed their awareness as a result of being exposed to the course Special Topic, and a one-unit course on the mother tongue. The experimental group students revealed their awareness at a significant level, as shown in Table 2. This evidently supports the training program in attaining its goal on providing the students with adequate and relevant information on the MTB-MLE policies, framework and issues.

Table 1: Comparison of Level of Awareness by the Pre-test and Post-test of the Experimental Group and Control Group

| MTB-MLE Concerns | Pre-test | | Post-test | | t-test | P value |
|----------------------------------|----------|------|-----------|------|----------|-------------|
| | Mean | SD | Mean | SD | | |
| <i>Control Group (N=37)</i> | | | | | | |
| MTB-MLE Policies | 3.50 | 0.20 | 3.67 | 0.43 | -1.3836 | 0.0874 |
| MTB-MLE Framework | 2.95 | 0.32 | 3.30 | 0.51 | -2.4077 | 0.0106 |
| MTB-MLE Issues | 2.78 | 0.33 | 3.57 | 0.53 | -4.9535 | 0.0000 |
| Overall | 3.08 | 0.18 | 3.52 | 0.40 | -3.6172 | 0.0004 |
| <i>Experimental Group (N=40)</i> | | | | | | |
| MTB-MLE Policies | 3.87 | 0.18 | 4.21 | 0.19 | -32.3991 | 4.1315 E-30 |
| MTB-MLE Framework | 3.90 | 0.58 | 3.93 | 0.58 | -3.36490 | 0.0008 |
| MTB-MLE Issues | 4.00 | 0.30 | 4.02 | 0.31 | -2.4807 | 0.0087 |
| Overall | 3.92 | 0.27 | 4.05 | 0.28 | -23.2672 | 8.9238 E-25 |

* $p < .05$ – significant

Table 2: Comparison of the Level of Awareness by MTB-MLE Concerns in the Experimental and Control Group

| MTB-MLE Concerns | Control (N=37) | | Experimental (N=40) | | t-test | P value |
|-------------------|-------------------|------|------------------------|------|--------|-------------|
| | Mean | SD | Mean | SD | | |
| MTB-MLE Policies | 3.67 | 0.43 | 4.21 | 0.19 | 4.2430 | 6.2323 E-05 |
| MTB-MLE Framework | 3.30 | 0.51 | 3.93 | 0.58 | 3.6728 | 0.0004 |
| MTB-MLE Issues | 3.57 | 0.53 | 4.02 | 0.31 | 3.0236 | 0.0034 |
| Overall | 3.52 | 0.40 | 4.05 | 0.28 | 4.0214 | 0.0001 |

$p < .05$ - significant

The results in Table 2 point to impacts of training and the materials on the experimental students' level of awareness as responsive to their needs for recent and comprehensive information on MTB-MLE.

2. Literacy level in the Mother Tongue (Vernacular Bikol), Specifically Translation Skills from English to Bikol

Table 3 shows the *students'* translations skills in both the experimental and control groups as not significantly enhanced by the training shown by the t-test results of translations of phrases, sentences and paragraph as assessed by voluntary experts from the Faculty of Education, Bicol University. Though the relevant training on translation activities was provided, it was possible that the participating subjects could have needed more time in yielding incremental improvement. Besides, translation skills naturally required competency in two languages, which was not easy to master within the training period. It was possible that the students found translating texts as a rigorous and time-consuming process, as shown in their borrowing English terms in their translated texts. It could also suggest that the materials given in the MTB-MLE Translation Guide, the trilingual dictionary, and the orthography of Bikol perhaps were not studied further beyond the training.

Table 3: Comparison of Translation Skills by the Pre-test and Post-test of the Experimental Group and Control Group

| Specific Translation Skills | Pre-test | | Post-test | | t-test | P value |
|----------------------------------|----------|------|-----------|------|---------|---------|
| | Mean | SD | Mean | SD | | |
| <i>Control Group (N=30)</i> | | | | | | |
| Translating phrases | 2.10 | 0.37 | 2.17 | 0.28 | -1.4392 | 0.0803 |
| Translating sentences | 1.50 | 0.47 | 1.47 | 0.46 | 1.0000 | 0.1627 |
| Translating paragraph | 1.60 | 0.25 | 1.63 | 0.31 | -0.5708 | 0.2862 |
| Over-all | 1.73 | 0.10 | 1.76 | 0.11 | -1.4392 | 0.0803 |
| <i>Experimental Group (N=42)</i> | | | | | | |
| Translating phrases | 2.33 | 0.32 | 2.43 | 0.25 | -1.1594 | 0.1264 |
| Translating sentences | 1.62 | 0.24 | 1.64 | 0.24 | -0.3740 | 0.3551 |
| Translating paragraph | 1.93 | 0.17 | 1.95 | 0.19 | -0.3297 | 0.3716 |
| Overall | 1.96 | 0.14 | 2.01 | 0.12 | -1.0000 | 0.1615 |

p < .05 – significant

However, the students who participated in the training program showed significant results in their phrase and paragraph translation, as shown in Table 4. The t-test results show the translation outputs of the experimental group students higher than those of the control group. This could suggest usefulness of text translation training from English and Filipino to Bikol, for some trained students to a certain extent.

Table 4: Comparison of the Translation Skills of the Experimental Group and Control Group

| Specific Translation Skills | Experimental Group (N=42) | | Control Group (N=30) | | t-test | P value |
|-----------------------------|---------------------------|------|----------------------|------|--------|---------|
| | Mean | SD | Mean | SD | | |
| Translating phrases | 2.43 | 0.25 | 2.17 | 0.28 | 2.1339 | 0.0363 |
| Translating sentences | 1.64 | 0.24 | 1.47 | 0.46 | 1.2827 | 0.2037 |
| Translating paragraph | 1.95 | 0.19 | 1.63 | 0.31 | 2.7186 | 0.0082 |
| Overall | 2.01 | 0.12 | 1.76 | 0.11 | 3.1049 | 0.0027 |

p < .05 – significant

3. Pedagogical Competence as Revealed by Lesson Planning

Table 5: Comparison of Lesson Planning Competencies by Pre-test and Post-Test of the Experimental Group (N=33)

| Areas Assessed | Pre-test | | Posttest | | t-test | P value |
|-------------------------|----------|------|----------|------|----------|-------------|
| | Mean | SD | Mean | SD | | |
| Objectives | 2.39 | 0.16 | 3.74 | 0.15 | -14.9282 | 2.8445 E-16 |
| Introduction/Motivation | 3.28 | 0.02 | 3.94 | 0.02 | -17.7732 | 1.9230 E-18 |
| Strategies | 3.67 | 0.00 | 3.88 | 0.03 | -7.4833 | 8.0674 E-09 |
| Procedures | 3.20 | 0.05 | 3.79 | 0.06 | -10.0869 | 9.1677 E-12 |
| Assessment | 2.71 | 0.03 | 3.58 | 0.06 | -17.3304 | 4.0044 E-18 |
| Overall | 3.05 | 0.02 | 3.78 | 0.01 | -26.7925 | 8.6441 E-24 |

p < .05 - significant

Table 5 shows the experimental group students with significant improvement in their lesson planning skills in terms of formulating objectives, preparing introduction and motivation, selecting strategies, preparing procedures or the learning tasks in the lesson proper, and selecting assessment tools. This indicates that the presentations and activities in training addressed the needs of the students in terms of lesson planning (Wright, S. P., Horn, S. P., & Sanders, W. L., 1997; Rockoff, 2004). Such activities were: preparing and critiquing of the lesson plans per part, teaching demonstration of practitioners with real pupils, return demonstration of selected students, pre- and post-conferencing before the teaching demonstration, and critiquing of the return demonstrations, use of adequate and relevant materials used during the training. To the researchers, these activities appeared to help improve lesson planning skills of the students.

Table 6: Comparison of Lesson Planning Competencies by Pre-test and Post-Test of the Control Group (N=38)

| Areas Assessed | Pre-test | | Post-test | | t-test | P value |
|-------------------------|----------|------|-----------|------|----------|---------|
| | Mean | SD | Mean | SD | | |
| Objectives | 1.32 | 0.24 | 1.36 | 0.21 | -1.6710 | 0.0515 |
| Introduction/Motivation | 2.44 | 0.40 | 2.42 | 0.33 | 0.5722 | 0.2853 |
| Strategies | 2.55 | 0.35 | 2.54 | 0.32 | 0.8128 | 0.2107 |
| Procedures | 2.11 | 0.29 | 2.11 | 0.27 | -0.29787 | 0.3837 |
| Assessment | 2.30 | 0.34 | 2.32 | 0.23 | -0.57221 | 0.2853 |
| Over-all | 2.15 | 0.12 | 2.15 | 0.14 | -0.0865 | 0.4657 |

**p<.05 – significant*

As shown in Table 6, the control group students who were not trained in lesson planning and in other learning areas using the mother tongue as a medium of instruction did not show significant improvement in their lesson planning skills in all the five assessed areas (1) objectives, (2) introduction/motivation, (3) strategies, (4) procedures, and (5) assessment. This finding could suggest that their courses in Professional Education and Special Topic on the Mother Tongue did not seem to enhance their skills sufficiently in preparing their lesson plans or other learning areas in the mother tongue as a medium of instruction.

Table 7: Comparison of Lesson Planning Competencies by the Post-test of the Experimental Group and Control Group

| Areas Assessed | Experimental(N=33) | | Control (N=38) | | t-test | P value |
|-------------------------|--------------------|------|----------------|------|---------|-------------|
| | Mean | SD | Mean | SD | | |
| Objectives | 3.74 | 0.15 | 1.36 | 0.21 | 23.5006 | 1.1958 E-34 |
| Introduction/Motivation | 3.94 | 0.02 | 2.42 | 0.33 | 14.8749 | 3.2506 E-23 |
| Strategies | 3.88 | 0.03 | 2.54 | 0.32 | 13.2548 | 1.2117 E-20 |
| Procedures | 3.79 | 0.06 | 2.11 | 0.27 | 16.8534 | 3.6907 E-26 |
| Assessment | 3.58 | 0.06 | 2.32 | 0.23 | 13.4368 | 6.1293 E-21 |
| Over-all | 3.78 | 0.01 | 2.15 | 0.14 | 24.1226 | 2.3906 E-35 |

p<.05 – significant

Table 7 shows the significant post-tests results of lesson plans prepared at the end of the semester performed by the experimental group students in comparison with those in the control group. Their pedagogical competence was in lesson planning in the mother tongue or in other learning areas at the level to Kindergarten to Grade 3. Such significant results in the experimental group clearly support the students in their needs for creating materials for lesson plans as well as assistance from experts and practitioners in improving their target competencies in lesson planning.

4. Pedagogical Competence in Using Mother Tongue as Medium of Instruction.

The researchers randomly selected five students assigned in Grades 1 to 3 from each group for classroom observation. As shown in Table 8, the observation ratings of selected students point to better performance of those in the experimental group.

Table 8: Summary of the Observation Ratings for Teaching of Selected Cases from the Experimental and Control Groups

| Selected Cases | Experimental Group | | | | | Control Group | | | | |
|----------------|--------------------|------|------|------|---------|---------------|------|------|------|---------|
| | 1 | 2 | 3 | 4 | Overall | 1 | 2 | 3 | 4 | Overall |
| A | 3.20 | 3.06 | 3.01 | 3.00 | 3.07 | 2.70 | 2.72 | 2.88 | 2.83 | 2.78 |
| B | 3.90 | 3.95 | 3.94 | 3.50 | 3.82 | 2.50 | 2.33 | 2.38 | 2.17 | 2.34 |
| C | 3.10 | 3.45 | 3.63 | 3.50 | 3.42 | 3.40 | 3.67 | 3.00 | 3.42 | 3.37 |
| D | 3.20 | 3.39 | 3.07 | 3.75 | 3.35 | 3.20 | 2.61 | 2.63 | 2.67 | 2.78 |
| E | 3.30 | 3.28 | 3.38 | 3.42 | 3.35 | 3.20 | 2.94 | 2.94 | 3.25 | 3.08 |

1-Addressing learners' diversity; 2-Teacher behavior in actual teaching; 3-Managing learner's behaviour in the classroom; 4- Planning, assessing and reporting learner's outcomes 1.0-1.50 – Below Basic; 1.51-2.50 – Basic Level; 2.51-3.50 – Proficient Level; 3.51-4.0- Highly Proficient Level

Comments on classroom observation given by voluntary experts and practitioners indicated pedagogical competence as well as areas for improvement of the students as pre-service teachers. Box 1 shows positive comments for the selected cases. It should be noted that cases from the experimental and control groups received favorable comments. Such findings suggest that pre-service teachers should be provided with opportunities to demonstrate their pedagogical competence at the classroom level with close monitoring and immediate feedback from experienced practitioners (Darling-Hammond, Chung Wei, & Johnson, 2009; Hightower, Delgado, Lloyd, Wittenstein, Sellers & Swanson, 2011).

Box 1: Observations and Comments on Pedagogical Competence of Selected Cases

| <i>Experimental Group</i> | <i>Control Group</i> |
|---|--|
| <p><i>Student A</i></p> <ul style="list-style-type: none"> • <i>She has well prepared visual aids, she was able to sustain students interest.</i> • <i>She was well modulated voice and pleasing personality.</i> • <i>The teacher gives appropriate test component to the competencies.</i> • <i>In the discussion, do not stick to the book; more questions should be given.</i> • <i>Let the pupils give the concept with the guidance of the teacher.</i> | <p><i>Student A</i></p> <ul style="list-style-type: none"> • <i>She had an interactive learning.</i> • <i>The story was clearly read.</i> • <i>The evaluation only focused on noting details, assignments does not reinforce the two objectives.</i> |
| <p><i>STUDENT B</i></p> <ul style="list-style-type: none"> • <i>The teacher is competent in the use of the mother tongue as a medium of instruction in teaching AP.</i> • <i>Used appropriate instructional materials in teaching AP.</i> • <i>The pupil should have given describing words for persons, places and things.</i> • <i>The assessment is given in Bikol although the media used in the discussion use Filipino and English.</i> • <i>Parallelism and consistency are attained.</i> | <p><i>Student B</i></p> <ul style="list-style-type: none"> • <i>Formative/ evaluation was not evident.</i> • <i>Opportunities were provided to demonstrate learning of the pupils.</i> • <i>Prepared sufficient instructional materials.</i> • <i>Did not provide opportunities for learner to demonstrate their learning.</i> • <i>Add more engaging activities to encourage pupils participation and minimize descriptive behavior.</i> |
| <p><i>Student C</i></p> <ul style="list-style-type: none"> • <i>The teacher shows enthusiasm in teaching MTB-MLE using Big book.</i> • <i>The teacher is very creative in doing visual aids.</i> | <p><i>Student C</i></p> <ul style="list-style-type: none"> • <i>Gives good follow- up question, uses colorful visual aids.</i> • <i>Teacher presents pictures in presenting synonyms so it becomes meaningful.</i> |
| <p><i>Student D</i></p> <ul style="list-style-type: none"> • <i>Proficient in the delivery of lesson in the mother tongue.</i> • <i>The teacher must consider the issue because making pupils understand and learn is the main concern/goal of education.</i> | <p><i>Student D</i></p> <ul style="list-style-type: none"> • <i>The teacher could have integrated local bodies of water to make it more responsive to local needs.</i> • <i>Had a hard time establishing discipline or order in the class.</i> |
| <p><i>Student E</i></p> <ul style="list-style-type: none"> • <i>The lesson is well implemented; the teacher was able to deliver well in the mother tongue.</i> • <i>The questions given in the discussion are almost all knowledge question; these should be more HOT questions.</i> • <i>The procedure of the lesson is well-sequenced.</i> | <p><i>Student E</i></p> <ul style="list-style-type: none"> • <i>Teacher should call pupils at the back to recite or give answers.</i> • <i>The teacher was adequately guided by the cooperating teacher.</i> • <i>Appropriate materials are used for the review and drill.</i> • <i>Be aware of the students who are not listening.</i> |

Based on the observation results, the researchers interviewed and conducted focus group discussions with the experimental group students. The pre-service teachers reported their gained confidence as well as their support for the training series. They asserted that the training series enabled them to apply specific strategies to tasks in their teaching demonstration as required.

5. Stakeholders’ Assessment and Feedback in the MTB-MLE Training

The students in the training program were assessed as outstanding in the training series in terms of training content, training materials, training management and resource persons and facilitators. Their ratings ranged from 4.71 to 4.88 as shown in Table 9. These students described their training as highly relevant, very useful, with adequate and informative materials, with interactive and interesting training activities, and well-prepared resource persons. Some of their comments are shown in Box 2. These findings reflect the high level of clientele satisfaction with the University Quality Policy, and thus speak of effectiveness of the training program.

Table 9: Students’ Assessment of the Training Series

| Criteria | Training 1 | Training 2 | Training 3 | Overall Rating | Interpretation |
|-------------------------------|------------|------------|------------|----------------|----------------|
| Training Content | 4.88 | 4.85 | 4.77 | 4.83 | Outstanding |
| Training Management | 4.50 | 4.71 | 4.92 | 4.71 | Outstanding |
| Training Materials | 4.76 | 4.83 | 4.77 | 4.79 | Outstanding |
| Resource Person / Facilitator | 4.90 | 4.89 | 4.84 | 4.88 | Outstanding |

5= Outstanding 4= Very Satisfactory 3=Satisfactory 2= Fair 1= Poor

Box 2: Students’ Feedback on the MTB-MLE Training

- *The seminar will help us as future teachers to dwell on different circumstances that we might experience in the field of teaching. We are in need of more information about the orthography of our L 1 and be guided on how to use it aside from the guide of legal basis.*
- *It was a fun experience and we gain lots of facts about K to 12.*
- *The training program is indeed informative and helpful.*
- *I’m very thankful for being part of this training. Thank you.*
- *The training is very nice. It helps us to gain more knowledge about MTB-MLE.*
- *The training is very helpful to us to foresee what we would be doing in the future and what to expect also.*
- *We are so grateful for being a participant in the training; hopefully some other students could have the chance also to attend because it is really helpful.*
- *The materials are informative and relevant.*
- *The materials are adequate and properly packaged.*
- *Layout Design is creative and unique.*

6.3 Good Practices for the Mainstream of Special Program on MTB-MLE in the Teacher Education Curriculum

The analysis of the implementation of the MTB-MLE Special Program in the school year 2014-2015 revealed good practices pertinent to the roles of stakeholders, instructional

strategies and assessment practices. Good practices were derived from comments and feedback given by the stakeholders: facilitators, resource persons, concerned officials and faculty, and students together with observation data (Rivkin, Hanushek, and Kain, 2005). Such identified good practices constituted the mainstream of the MTB-MLE Special Program in the Teacher Education Curriculum.

Good practices noted the roles of stakeholders as follows: (1) participation of Sentrong Wika through sharing of relevant materials, (2) partnership with DepEd experts to serve as resource persons, (3) proactive leadership of College Dean, Department Heads and concerned faculty, (4) openness of students to intervention program on MTB-MLE, (5) collaborative preparation of materials on MTB-MLE and (6) implementation of the MTB-MLE Program for Pre-service Teachers. Different stakeholders had their specific involvements as contributing to success of the curriculum design, development, and delivery of the MTB-MLE Special Program for pre-service teachers (Broad & Evans, 2006). As for the planning phase for the program curriculum guide and training materials, the concerned officials and teachers were engaged in generating the target design of the program and materials (Cervetti, Kulikowich, & Bravo, 2015; Karagöza & Saka, 2015). Collaboration engaged a number of teacher-researchers and experts/ practitioners in producing responsive and comprehensive materials (Newton, Poon & Stone, 2013). The students' participation in the program implementation, their focus group discussions, and interviews during the pre-service teaching yielded feedbacks essential to the final packaging of the program and materials. In addition, involvement of other concerned officials of the University and experts/ practitioners from the Department of Education, resource persons, and demonstration teacher-critics in the MTB-MLE Special Program in sharing relevant materials evidently accounted for success of the program.

Good practices in the use of instructional strategies included: (1) use of relevant and adequate materials, as one material per student, (2) use of technology-supported learning activities/presentations, (3) use of learning-centered collaborative activities, (4) inclusion of demonstration teaching by experts, and demonstration of students with post conferencing. The delivery of the training program gave impetus for the attainment of target outcomes. The facilitators ensured adequacy of materials available to all the participants with one set of materials for each student. The delivery strategies used by the students utilized appropriate technology-supported presentations which facilitated interactive learning experiences (Nunan, 1999). The use of collaborative activities such as group activities, group translation of sample texts, group preparation for lesson plans and instructional aids engaged all the participants in a non-threatening learning environment. The demonstration teaching of the invited practitioners with pre- and post-conferencing provided for the participants with first-hand experience in changing to use the mother tongue as a medium of instruction (Lamie, 2004). Such provided learning experience activated responsiveness and interactions among the pre-service teachers, thus yielding the target outcomes of the MTB-MLE Special Program.

7. Conclusion

The implementation of the MTB-MLE Special Program in Basic Education in the Philippines demanded adjustment in the teacher preparation in terms of content and pedagogical knowledge and competencies to enable pre-service teachers to become effective implementers of MTB-MLE at the primary level. Such a goal was of prime importance to be attained by the Bicol University and the State Department of Education.

The obtained findings show possible upgrading of the participating pre-service teachers' level of awareness on MTB-MLE policies, their literacy level, pedagogical competence and issues. The teacher-students, voluntary experts/ practitioners, and the teacher education faculty asserted that the training program created highly relevant, useful and informative materials for the pre-service teachers. The students were satisfied with the training series as shown in their positive responses to training contents, training materials, training management and resource persons. They found the design, development, implementation and monitoring, and evaluation of the MTB-MLE Special Program for Pre-service Teachers pertinent to their professional needs. They were well aware of the major features as indicators of good practices: (1) K-12 and MTB-MLE-aligned, (2) needs-based, (3) interactive, technology-supported, and appropriate to the learners in a non-threatening learning environment, (4) materials being validated, (5) assessment combining conventional and authentic assessment strategies, (6) appropriately coordinated with stakeholders, and (7) partnership involved with the Department of Education. The seven features of the MTB-MLE Special Program and the good practices reported by all parties concerned definitely pointed to a good success of the MTB-MLE Special Program.

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