Collaborative Translanguaging Formative Assessment in Mother Tongue-Based Multilingual Education

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ARTICLE INFO	ABSTRACT
    	This research conducted classroom action research in Grade 1 of a Mother Tongue-Based Multilingual Education (MTB-MLE) program, which aims to promote the use of local languages as mediums of instruction in the early years of education. The study found that Ilokano learners tended to use English more often than Ilokano, which highlighted the importance of supporting their cultural identity and heritage through the MTB-MLE program. The Ilokano-Based Translanguaging Approach to Mother Tongue-Based Multilingual Education (IBTA-MTB-MLE) was developed to support instruction, and a formative assessment strategy called Collaborative Translanguaging Formative Assessment (CTFA) was developed to align with the teaching approach. The study aimed to test the effectiveness of CTFA by preparing four lesson sessions where learners work together to think, talk, write, and give feedback using their full range of linguistic repertoire. After the implementation of CTFA, a pre-test and post-test were conducted to determine the achievement of the Ilokano learners in MTB-MLE. The results showed that the majority of the students moved to higher ranges of score after the intervention, with an increase in mean scores from 20.1 to 25.87. The study highlights the benefits of translanguaging in language education and collaboration in assessment.

Introduction

The Philippines has institutionalized Mother Tongue-Based Multilingual Education (MTB-MLE) through RA 10533, or the Enhanced Basic Education Act of 2013. The law mandates teaching local mother tongues as a language of instruction and subject from kindergarten to grade three, followed by the official languages (Filipino and English) as languages of instruction after grade three. MTB-MLE values and recognizes the linguistic diversity of learners, promoting equitable access to education, and improving learning outcomes.

Despite the potential benefits of MTB-MLE, it faces challenges such as the complex linguistic situation in the Philippines, the hierarchical view of language, misconceptions

about multilingual education, and appropriate assessment. Although the Department of Education (DepEd) Order 74, series of 2009, specifies that educational assessment should focus on subject content and not be influenced by the language of testing, research indicates that the monolingual method is still the dominant method of assessment, which is not suitable for multilingual teaching methods. This misalignment leads to differences and inadequacies in classroom assessment, further exacerbating the challenges faced by MTB-MLE (Gempeso & Mendez, 2021; Wang & Li, 2020).

To address this issue, this study proposes the use of Online Collaborative Translanguaging Formative Assessment in MTB-MLE. This form of assessment aims to promote collaborative learning and effective communication among students and teachers by allowing the use of multiple languages in the assessment process. By integrating translanguaging in formative assessment, teachers can provide feedback and support students in their language development while ensuring that the assessment aligns with learning objectives. This study aims to investigate the effectiveness of Online Collaborative Translanguaging Formative Assessment in promoting language development and academic achievement in the context of MTB-MLE.

Research Methods

This section provides an overview of the research design, participants, data collection, data analysis, and ethical considerations of this study.

Research Design

This research was conducted in my grade 1 classes as classroom action research (CAR). CAR is a design that combines practitioner inquiry with practitioner inquiry to determine what works best in a specific classroom scenario to promote learning (Orland-Barak, 2009). The aim of CAR is to assist teachers in improving their classroom instruction (Mettetal, 2001).

Research Participants

Thirty (30) Ilokano grade 1 learners participated in this study. This number corresponded to the number of parents/guardians as well as learners who agreed to participate in this study based on their responses to the informed consent and assent document presented before conducting this study. Also, this was half of the number of learners (60) in Grade 1 at Mariano Marcos State University-Laboratory Elementary School.

Data Collection

To gather the necessary data needed to determine the appropriate assessment strategy, I reviewed the documented, transcribed, and thematically analyzed online synchronous class observations. To find out if there was a significant increase in the level of achievement of the Ilokano learners of MTB-MLE after employing the assessment strategy, a 40-item pre-test and post-test were conducted before and after four lesson sessions in which the identified assessment strategy was employed.

Data Analysis

Descriptive statistics such as mean, standard deviation, and frequency counts were used to summarize the data obtained from the pre-test and post-test. The paired-samples t-test was used to determine if there was a significant difference between the pre-test and post-test scores.

Ethical Considerations

This study was approved by the Mariano Marcos State University-Laboratory Elementary School Ethics Review Committee. All participants (parents/guardians and learners) provided informed consent and assent, respectively, before the start of the study. To ensure confidentiality, all data were coded and stored securely. The participants were informed that they had the right to withdraw from the study at any time.

Findings and Discussions

This section is the most important section of your article. The analysis or results of the research should be clear and concise. The results should summarize (scientific) findings rather than providing data in great detail. Please highlight differences between your results or findings and the previous publications by other researchers. (Cambria, 12pt, spacing 1.15)

Situation in the Multilingual Classroom

This classroom action research was conducted in my Grade 1 Mother Tongue-Based Multilingual Education (MTB-MLE) classes, which were one of the grade levels under the MTB-MLE program that aimed to promote the use of local languages as mediums of instruction in the early years of education. All of the learners in my classes were residents of Ilocos Norte, and their mother tongue was Ilokano.

However, upon reflecting on the learners' online synchronous class conversations that were documented, transcribed, and analyzed, it was found that most of them (about 75%) tended to use English more often than Ilokano. Although they could still answer and ask some basic questions and participate in activities that were conducted in Ilokano, it was clear that their proficiency in the language was not at the level that was expected. An instance was also noted when a child participated in an Ilokano conversation even though she had said that she did not know how to speak and understand Ilokano.

Noting these multilingual tendencies of the Ilokano learners, it was important to ensure that their cultural identity and heritage were still being supported through the MTB-MLE program. Their knowledge of Ilokano, Filipino, and English was ascertained, and their use of language was described as translanguaging, which occurred productively in situations when learners were collaborating. In a previous study, the patterns in these learners' translanguaging were identified and described in order to inform an MTB-MLE teaching approach called Ilokano-Based Translanguaging Approach to Mother Tongue-Based Multilingual Education (IBTA-MTB-MLE), which anchored on the learners' first language as the basis for teaching other languages.

As IBTA-MTB-MLE was already being utilized to aid instruction, it was important to identify an appropriate and effective assessment strategy that was aligned with the teaching approach.

The Strategy

During online instruction, I conducted online synchronous class observations, documenting, transcribing, and thematically analyzing them. In this research, I ascertained learners' knowledge of Ilokano, Filipino, and English and described their use of translanguaging, which is the use of one's idiolect without regard for established language labels or boundaries. Translanguaging has been widely applied to language education and has contributed to the transformation and acceptance of many languages as a component of schooling.

Previously, I identified patterns in learners' translanguaging to inform an MTB-MLE teaching approach called IBTA-MTBMLE (Tejano, 2022). Pursuant to DepEd Order 74, series of 2009, which instructs that the language of instruction must also be the language of assessment, it is necessary to align the approach in teaching to the approach or strategy in assessment. In this study, translanguaging was used for formative assessment, which focuses on learning rather than rating learners' work.

To determine the appropriate translanguaging formative assessment, I reviewed the online synchronous class observations and found that translanguaging occurs more productively in collaborative situations. The larger research project aims to describe the language use of learners from Kindergarten to Grade 3 at Mariano Marcos State University-Laboratory Elementary School, informing instructional and assessment decisions, particularly in MTB-MLE.

Considering the benefits of translanguaging in expressing ideas and the productiveness of collaboration, I developed a formative assessment strategy called collaborative translanguaging formative assessment (CTFA). CTFA is a formative assessment strategy where learners work together to think, talk, write, or even draw while giving each other feedback on tasks and questions using their full range of linguistic repertoire.

To test the effectiveness of CTFA, four lesson sessions were prepared by the teacher, each building on previous lessons on nouns, adjectives, and verbs towards writing simple sentences, using them in conversations, and composing 3 to 5-sentence paragraphs. After a 15-minute discussion, CFTA was implemented through Zoom breakout rooms. The phases in the implementation of CTFA were: (1) orientation, (2) setting standards, (3) think/talk/write-pair-share or online collaboration using Google Jam Board template, (4) monitoring, (5) presentation of outputs, and (6) bridge when the teacher and the whole class rewrite each output to Ilokano. All phases were facilitated through Ilokano-based translanguaging. A 40-item pre-test and post-test were conducted before and after the four lesson sessions.

Achievement of the Ilokano learners of MTB-MLE
before and after employing the assessment strategy

Based on the table next page, the pre-test and post-test scores were categorized into five ranges of score: Very Satisfactory (33-40), Satisfactory (25-32), Fair (19-24), Poor (9-16), and Needs Improvement (0-8). Prior to the intervention, no students received a score within the Very Satisfactory range, but after the intervention, 2 students (6%) were able to achieve this level. The majority of students (57%) moved from the Satisfactory range to the higher range of score. However, some students (27%) moved from the Fair range to the Satisfactory range. A small percentage of students (10%) who scored in the Poor range prior to the intervention remained in the same range in the post-test. The mean score of the pre-test was 20.1, while the mean score of the post-test was 25.87, indicating an increase in scores after the intervention. The difference between the mean scores of the pre-test and post-test was -5.77, suggesting that there was a significant improvement in the learners' performance after the implementation of the collaborative translanguaging formative assessment (CTFA). The t-value of 7.6269 and probability of 0.0000021 further support the significant improvement in the learners' performance. The t-value indicates the difference between the pre-test and post-test means, while the probability shows the likelihood of obtaining the observed results by chance. In this case, the probability is very low, which means that the improvement in scores is unlikely to have occurred by chance.

Table 1. Results of the pretest and post-test as well as the t-test.

An example of a heading	Column A (t)	Column B (T)
Add an entry	1	2
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During the implementation of the translanguaging assessment, the learners exhibited intense collaboration. Even those who do not typically participate in class discussions became involved in their small groups, irrespective of the language used. Communication and understanding took place seamlessly, despite the use of three languages: Ilokano, English, and Tagalog, with Ilokano being the dominant language. Notably, even learners who were more proficient in English attempted to use Ilokano, particularly when discussing nouns, adjectives, verbs, and Ilokano expressions such as "met," "ana met," and "alan a," which were relevant to the lesson. Although Tagalog was used, it was less frequent than English.

Their output during the translanguaging assessment demonstrated the productive communication that occurred. When compared to the individual formative assessment, the learners produced more varied sentences, wrote longer sentences, delved deeper into the topics, and used a wider vocabulary, even if it fell under Ilokano, English, or Tagalog. However, punctuation errors and spelling confusion were noticeable, and the learners struggled with the rules of spelling in Ilokano, Tagalog, and English. The same confusion was apparent in their pronunciation during their presentations.

These observations do not indicate a failure of the assessment strategy but provide feedback on the learners' knowledge, which is the primary purpose of formative assessment. As a teacher, these observations will help me make instructional decisions to address these identified gaps.

The results of the study show that the implementation of the translanguaging assessment had a positive impact on the students' language learning, particularly on their productive communication skills. The intense collaboration observed among the students during the assessment suggests that translanguaging can facilitate communication and understanding even among students who speak different languages. This finding is consistent with previous studies on translanguaging, which have shown that it can promote social interaction and collaboration among students (García & Kleyn, 2016; Lewis, Jones, & Baker, 2012). Furthermore, the students' outputs during the assessment were more varied and demonstrated a deeper understanding of the topics discussed. However, the observation of punctuation errors and spelling confusion in the outputs suggests the need for further instruction on language conventions. This finding is supported by research on the effectiveness of explicit instruction in improving students' writing skills (Graham, McKeown, Kiuhara, & Harris, 2012; Saddler & Asaro-Saddler, 2010). Overall, the results of this study suggest that the use of translanguaging assessment can be an effective strategy for promoting communication and understanding in multilingual classrooms, but that additional instruction on language conventions may be necessary to support students' language development.

Conclusion and Recommendation

Based on the results of the translanguaging assessment conducted, it can be concluded that the implementation of translanguaging as an assessment strategy was effective in facilitating productive communication among the learners. The collaboration and active participation among the learners, regardless of their language background, was evident during the assessment. It was also observed that even learners who do not often participate in class discussions were able to participate in their small group discussions, which highlights the benefits of translanguaging as an inclusive assessment strategy. The use of multiple languages during the assessment also allowed for a more varied and comprehensive discussion of topics, as learners were able to draw from their multilingual backgrounds.

However, it should be noted that despite the benefits of translanguaging, there were still noticeable gaps in the learners' outputs in terms of punctuation, spelling, and pronunciation. These gaps can be attributed to the learners' confusion with the different spelling and pronunciation rules in the languages they used during the assessment. Nonetheless, these gaps should be seen as feedback on the learners' knowledge and language proficiency, which can be used to guide instructional decisions in the future.

In light of these findings, it is recommended that translanguaging be further integrated into language assessment practices, particularly in multilingual contexts. This inclusive assessment strategy can provide a more accurate and comprehensive evaluation of

learners' language proficiency and facilitate productive communication and collaboration among learners with different language backgrounds. It is also recommended that teachers provide explicit instruction on the spelling and pronunciation rules of the languages used during the assessment, to help learners improve their language proficiency in all languages they use. Moreover, future studies should further explore the effectiveness of translanguaging as an assessment strategy, particularly in terms of its impact on learners' motivation and attitudes towards language learning.

In line with other studies (Garcia & Wei, 2014; García & Sylvan, 2011; Hornberger & Link, 2012; Suresh & Chandrasegaran, 2019), this study highlights the benefits of translanguaging as an inclusive assessment strategy in multilingual contexts. These findings suggest that translanguaging can be a valuable tool in language education, particularly in contexts where learners come from diverse linguistic backgrounds. Additionally, the study supports the idea that language is a dynamic and flexible system that can be used creatively and effectively in different contexts (Canagarajah, 2013; Creese & Blackledge, 2010; García, Johnson, & Seltzer, 2017). Overall, this study underscores the need for teachers and educators to adopt a more inclusive and dynamic approach to language education, one that acknowledges and embraces the diverse linguistic backgrounds and competencies of learners.

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