# A CORRELATIONAL-COMPARATIVE STUDY OF GRADE 4, GRADE 5, AND GRADE 6 STUDENTS' SELF-EFFICACY FOR LEARNING AND PERFORMANCE IN INTEGRATED SUBJECTS WITH THEIR ACADEMIC ACHIEVEMENT IN A MOTHER TONGUE-BASED MULTILINGUAL EDUCATION CONTEXT IN 5 SJN-CBE SCHOOLS IN NORTHERN SHAN STATE, MYANMAR

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Abstract: The purpose of this quantitative study was to investigate whether there was a significant relationship between self-efficacy for learning and performance in integrated subjects of Grade 4, Grade 5, and Grade 6 students and their academic achievement in 5 SJN-CBE Schools, Northern State, Myanmar. An adapted version of the Motivated Strategies for Learning Questionnaire by Pintrich, Smith, Gracia, and McKeachie (1991) was used to collect data from a total of 433 students: 117 Grade 4 students. 159 Grade 5 students, and 157 Grade 6 students. The subjects' final assessment results were used to determine the integrated subjects' academic achievement levels. The researcher also compared the self-efficacy for learning and performance in integrated subjects among Grade 4, Grade 5, and Grade 6 students. Descriptive statistics (means and standard deviations) and statistical hypothesis testing (correlational analysis using Pearson product-moment correlation and oneway ANOVA) were used to analyze the data. The research findings indicated high levels of self-efficacy for learning and performance in integrated subjects of Grade 4, Grade 5, and Grade 6. The integrated subject's final assessment result revealed that grade 4, Grade 5, and Grade 6 students had good academic achievement. Pearson product-moment correlation suggested that selfefficacy for learning and performance in integrated subjects of Grade 5 and grade 6 students and their academic achievement were significantly positively correlated; in contrast, there was no significant relationship between students' self-efficacy for learning and performance in integrated subjects of Grade 4 students and their academic achievement. The findings indicated a significant

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difference in self-efficacy for learning and performance in integrated subjects between Grade 4 and Grade 5. Still, there was no significant difference between Grade 4 and Grade 6 students and between Grade 5 and Grade 6 students. Recommendations for students, teachers, parents, implementers and administrators of SJN-CBE, and future researchers are provided.

**Keywords**: Self-efficacy for learning and performance in integrated subjects, academic achievement, mother tongue-based multilingual education context, Northern Shan State, Myanmar

# Introduction

Mother tongue-based multilingual education (MTB MLE) is an education program for children who do not speak or understand the national language or school's official language. In this program, students' first language comes first. Students' mother tongue is taught as a subject and used as one of the languages of instruction to the end of primary school. Students' knowledge and experience gained from their homes and communities are appreciated as important tools for the learning process. That students become multilingual and multiliterate and achieve a high quality of education is an important goal of MTB MLE.

The first world conference on education for all was conducted in Thailand in 1990. Government officials from 155 countries met and identified the actions governments should take to ensure that all children and adults have access to quality education in their countries (UNESCO, 1990). Then, in 2000, with 164 countries' government officials in attendance, the second education for all (EFA) conference was held in Dakar, Senegal, emphasizing primary schoolage children, including those who have traditionally lacked access to formal education (UNESCO, 2000).

Also, in 2000, in a meeting at the United Nations (UN) headquarters in the United States. leaders of 189 countries agreed to work together to achieve eight Millennium Development Goals (MDGs) by 2015., According to Goal 2, governments will ensure that all children can complete a full course of primary schooling by 2015 (United Nations, 2013).

By 2010, according to the EFA Working Group, it was clear that few governments would achieve the Education for All priorities or Goal 2 of the MDGs by the target date of 2015. One reason many linguistic and ethnic minority children have difficulty in school is that they are taught in a language they struggle to comprehend. Globally, around 221 million children learn at schools in a language of instruction that they do not speak at their home, and

this limits their potential to develop fundamentals for future learning (UNESCO, 2010).

Leaders from 193 countries agreed to implement seventeen Sustainable Development Goals (SDGs) in another meeting at UN headquarters in September 2015. Goal 4 mandated all governments to "...ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (United Nations, 2015, p.17). It also indicated that MTB MLE is the key to unlocking SDG 4: Quality Education for All. The number of MTB-MLE programs has increased recently, especially in the Asia-Pacific Region: Afghanistan, Nepal, Pakistan, the Philippines, and Vietnam (Malone, 2018).

In Myanmar, the MTB MLE program was implemented in 2012 by Sammung Jinghpaw Wunpawng Hkalup Ninghtan Hpung (i.e., Shan State Kachin Baptist Union) Church/ Community Based Education (SJN- CBE) program, Northern Shan State, Myanmar (SJN Education Framework, 2014).

The program was implemented to promote well-developed children through a holistic education that develops critical and creative thinkers, lifelong learners, and confident sharers through their home language or mother tongue. Moreover, learning to value, appreciate and maintain the local language, knowledge and wisdom are core values of SJN-CBE. The goal is for students to acquire harmonious ways of living and thinking within their community and learn to serve the community's needs in Northern Shan State.

According to the researcher's experience, as this program is practicing a different approach to mainstream education in Myanmar, promoting self-efficacy and academic achievement while students have opportunities to learn in the language they understand and are familiar with is very important to all SJN-CBE stakeholders as the means of preserving local culture.

To this researcher's knowledge, the SJN-CBE program where MTB MLE is being implemented has been expanding rapidly as parents have become generally satisfied with their children's improvement in thinking skills, academic skills, and especially in behavior change toward becoming change agents of their families. However, when the researcher spoke with parents, some mentioned they were concerned that the MTB MLE approach may harm self-efficacy for learning the school subjects and overall academic achievement.

Regarding the effectiveness and impact of MTB-MLE in the SJN-CBE program, no previous research has been done in the targeted schools.

Therefore, the main focus of this research was to determine if there was a significant relationship between self-efficacy for learning integrated subjects and academic achievement in integrated subjects of Grade 4, Grade 5, and Grade 6 students, and also if there was a difference in self-efficacy for learning integrated subjects and academic achievement among the three grades. By carrying out this study, the researcher aimed to make an evidence-based contribution to the evaluation of MTB-MLE effectiveness in Grade 4, Grade 5, and Grade 6, which are the upper primary levels where the MTB-MLE approach is well established in the SJN-CBE program.

# **Research Objectives**

The following were the research objectives developed for this study.

- 1. To determine the level of self-efficacy for learning and performance in integrated subjects of Grade 4, Grade 5, and Grade 6 students in SJN-CBE Schools, Northern Shan State, Myanmar.
- 2. To determine the level of academic achievement for learning integrated subjects of Grade 4, Grade 5, and Grade 6 students in SJN CBE Schools, Northern Shan State, Myanmar.
- 3. To determine if there is a significant relationship between students' selfefficacy for learning and performance in integrated subjects of Grade 4 students and their academic achievement in SJN-CBE Schools, Northern Shan State, Myanmar.
- 4. To determine if there is a significant relationship between students' selfefficacy for learning and performance in integrated subjects of Grade 5 students and their academic achievement in SJN-CBE Schools, Northern Shan State, Myanmar.
- 5. To determine if there is a significant relationship between students' selfefficacy for learning and performance in integrated subjects of Grade 6 students and their academic achievement in SJN-CBE Schools, Northern Shan State, Myanmar.
- 6. To determine if there is a significant difference in self-efficacy for learning and performance in integrated subjects among Grade 4, Grade 5, and Grade 6 students at SJN-CBE Schools, Northern Shan State, Myanmar.

# **Conceptual Framework**

This study aimed to measure the relationship between Grade 4, Grade 5, and Grade 6 students' self-efficacy for learning and performance in integrated subjects in a mother tongue-based multilingual education context with their academic achievement in learning integrated subjects. Furthermore, the researcher compared the level of Grade 4, Grade 5, and Grade 6 students' self-efficacy for learning and performance in integrated subjects. The conceptual framework of the study is shown in Figure 1.

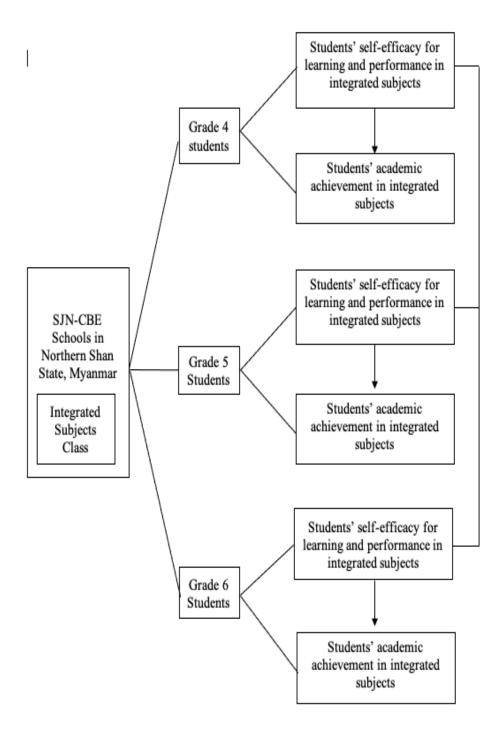


Figure 1. Conceptual Framework of the Study.

## **Literature Review**

Sustainable Development Goal Four (SDG 4) and Mother Tongue-Based Multilingual Education (MTB-MLE)

Leaders from 193 countries agreed to implement seventeen integrated Sustainable Development Goals (SDGs) in a meeting at UN headquarters in September 2015 to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030. The fourth goal is quality education, which aligns with the other 16 goals: health and well-being, gender equality, reduced inequalities, peace, justice, and strong institutions. The seventeen SDGs are integrated as it is recognized that action in one area will affect outcomes in others and that development is expected to balance social, economic, and environmental sustainability. The Incheon Declaration recognizes the importance of education as the main driver of the 2030 Agenda for Sustainable Development and critical for the success of all SDGs (UNESCO, 2015).

To achieve Sustainable Development Goal number four (SDG 4), ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all, MTB-MLE is effective in non-dominant language communities (Wisbey, 2017). The Mother Tongue (MT) first education movement began in the Asia-Pacific region in the 1980s. The awareness of the educational benefits provided by MTB-MLE led by the 2000s to international agencies and organizations to offer support for its implementation (Malone, 2016).

### Social Cognitive Theory

Social cognitive theory (SCT) is a learning theory based on the belief that people learn and develop new skills in a social context with reciprocal influences among personal, behavioral, and environmental factors (Bandura, 1997). SCT presents a model of understanding human behavior by positing that people act based on self-motivated inter-relationships among personal, behavioral, and environmental influences (Bandura, 1986).

Personal and environmental factors reflect the interactions between thought, affect, and function. People's emotional responses and their thinking patterns are partially determined by the outcomes of their actions (Bandura, 1989). As one of the personal factors, a student's self-efficacy may be influenced by environmental factors such as teachers, parents, learning materials, and the learning environment. Environmental and personal factors have interactive correlations between personal characteristics and environmental influences. Human expectations, beliefs, feelings, and cognitive competencies are

generated and amended by social influences that transmit information and initiate emotional responses through demonstrating instruction and social persuasion (Bandura, 1986). Thus teachers, as a determining element of a child's school environment, have a unique power to influence the child's motivation, learning efficacy, and, therefore, success or failure in school and after.

In the representation of reciprocal determinism, the interactions of behavioral, environmental, and personal factors influence an individual's successes or failures in goal attainment (Bandura, 1978). Reciprocity does not mean that the different sources of influence are of equal strength and not all reciprocal influences operate concurrently. However, given the bilateral influences, personal behavior is both the result of as well as a contributor to an individual's environmental conditions

## Self-Efficacy Theory

Self-efficacy is a significant personal factor in Bandura's social cognitive theory. Self-efficacy refers to a person's belief in his or her ability to succeed in designated situations or execute specific tasks (Bandura, 1997). It is a positive self-belief in one's capabilities or probabilities to productively complete a challenge and attain expected outcomes. A strong sense of personal efficacy increases human achievement and individual well-being in various ways (Bandura, 1994). From an academic perspective, self-efficacy conveys the level of self-assurance in performing specific actions or tasks connected to school lessons. As the level of self-efficacy can vary from one subject to another, it cannot be concluded that students who have high self-efficacy in one subject will also have similar confidence in other subjects.

According to Bandura (1994), four fundamental sources of influence are critical to cultivating people's self-efficacy: mastery experiences, vicarious experiences, social persuasion, and physiological factors. Teachers have the power to be major influencers of all of these factors.

# Self-Efficacy for Learning and Performance

In the academic context, self-efficacy refers to the student's self-perceptions of their abilities to perform particular tasks or solve problems related to school lessons. Since self-efficacy is context-specific, the level of students' selfefficacy can differ from one area or subject to another. For instance, students with high mathematics self-efficacy may not also have a similar level of selfefficacy in language learning (Bandura, 1997). Students develop their selfefficacy beliefs through the four sources of self-efficacy mentioned above: mastery experience, vicarious experience, social persuasion, and physiological factors (Bandura, 1994, 1997). Mastery experience is the most powerful source in strengthening individuals' self-efficacy beliefs (Bandura, 1977, 1993). Students' experience of successful learning achievement by overcoming obstacles creates a positive mastery experience and strengthens their self-efficacy beliefs, while the experience of failure lowers their sense of efficacy (Bryant, 2017). Vicarious experience, such as observing and comparing their performance to peers, also determines students' self-efficacy beliefs (Arslan, 2012; Margolis & McCabe, 2006). Students also develop their self-efficacy beliefs through social persuasion by interacting with the individuals around them. For instance, constructive and helpful feedback from their classmates and teachers and verbal encouragement from their parents can raise students' self-efficacy (Bryant, 2017). Lastly, physiological factors such as the effects of a classroom environment and students' mental state could also affect the students' self-efficacy formation. For instance, an encouraging, motivating, and moderately challenging classroom will make students feel they are efficacious in carrying out learning tasks successfully. In contrast, students will develop negative self-efficacy beliefs in a humiliating, threatening, and stressful classroom environment (Arslan, 2012; Bryant, 2017).

# Method/Procedure

In this section, the researchers describe the population, sample sampling technique, and research instrument used in this study.

# Population and Sample

For this study, the population was 938 Grade 4, Grade 5, and Grade 6 students (354 Grade 4 students, 316 Grade 5 students, and 268 Grade 6 students) who were studying integrated subjects in the context of mother tongue-based multilingual education (MTB MLE) in 29 SJN-CBE Schools in Northern Shan State, Myanmar, in the academic year of 2019-2020. A total of 433 Grades 4,5,6 students (117 Grade 4 students, 159 students Grade 5 students, 157 Grade 6 students) studying at five SJN-CBE Schools in the academic school year of 2019- 2020, Northern Shan State, Myanmar, were taken as a convenience sample.

# Research Instruments

The research instruments used in this study were the Self-efficacy for Learning and Performance in Integrated Subjects Questionnaire and the students' academic achievement in integrated subjects. The Self -efficacy of the Learning and Performance in Integrated Subjects Questionnaire was adapted from the self-efficacy subscale (items 5, 6, 12, 15, 20, 21, 29, 31).of the Motivated Strategies for Learning Questionnaire (MSLQ). The wording of all items was slightly modified to assess students' self-efficacy for learning and performance in integrated subjects. The words integrated subjects were added to all items. The 7- point Likert- type scale ranging from 1 (not at all true of me) to 7 (very true of me) was used to measure students' self-efficacy for learning and Performance in integrated subjects. The academic achievement for learning integrated subjects of Grade 4, Grade 5, and Grade 6 students was the result of the last assessment of the academic year 2019-2020 at the five SJN CBE Schools in Northern Shan State, Myanmar. Data collection was conducted in May 2020.

Table 1 presents the score ranges and interpretation for the Self-efficacy for Learning and Performance in Integrated Subjects Questionnaire.

Table 1. Scores and Interpretation for the Self-efficacy for Learning andPerformance in Integrated Subjects Questionnaire

	J 2		
Agreement level	Score	Mean score	Interpretation
Very true of me	7	6.51 - 7.00	Very high
True of me	6	5.51 - 6.50	High
Somewhat true of me	5	4.51 - 5.50	Slightly high
Neutral	4	3.51 - 4.50	Neutral
Somewhat untrue of me	3	2.51 - 3.50	Slightly low
Untrue of me	2	1.51 - 2.50	Low
Not at all true of me	1	1.00 - 1.50	Very Low

Validity and Reliability of the Self-efficacy for Learning and Performance in Integrated Subjects Questionnaire

The initial developers of the MSLQ tested the construct validity of the scales by applying confirmatory factor analysis, and all subscales proved acceptable factor validity (Pintrich et al., 1991). The reliability data of the self-efficacy value component applied in the previous study was illustrated in Table 2.

able 2. Remaining Statistics Data of the Research Questionnaire						
			Cronbach	s alpha value		
	Number of			Kadioglu		
Value	items for	Pintrich	Kivinen	and	Current	
component	each	et al.	(2003)	Uzuntiryaki	study	
-	component	(1991)		(2008)	-	
Self-efficacy						
for learning						
and						
performance	8	.93	.91	.86	.87	

Table 2. Reliability Statistics Data of the Research Questionnaire

### Academic Achievement in Integrated Subjects

The school's assessment activities (tests) were developed by the SJN-CBE guidelines and included scores in four learning areas - social studies, science, life skills, and morals.

Validity and Reliability of the Academic Achievement in Integrated Subjects For the validity of the assessment, assessment materials and activities were developed by experienced teachers under the assessment checklists developed by the SJN-CBE's curriculum developer. Furthermore, teacher trainers and education administrators visit the schools three times a year (in July, October, and January) to confirm that the assessments, the teaching and learning practices, the student's progress, the school management of the program, and their relationship are in line with the expected criteria of minimum standard of the SJN-CBE program. Regarding the reliability of the assessment, the assessment checklists and framework has been in use for eight years in SJN-CBE schools.

# Scoring and Interpretation of the Academic Achievement in Integrated Subjects

The academic achievement for learning integrated subjects of Grade 4, Grade 5, and Grade 6 students was the result of the last assessment of the academic year 2019-2020 at the five SJN CBE Schools in Northern Shan State, Myanmar. The researcher interpreted the level of academic achievement for learning integrated subjects into a 7-point rating scale as given in Table 3.

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	Percentage Scale	Academic Achievement		
		Interpretation		
	91 - 100	Excellent		
	81 - 90	Good		
	71 - 80	Fairly Good		
	61 - 70	Acceptable		
	51 - 60	Recommendation for support		
	41 - 50	Recommendation for support		
	0 - 40	Remedial class/ Repeat		

Table 3. Interpretation of the Score of Academic Achievement in IntegratedSubjects

## Findings

In this section, the research findings are presented according to the objectives. *Research Objective 1* 

The levels of self-efficacy for learning and performance in integrated subjects of Grade 4 (M = 5.23, SD = 1.40), Grade 5 (M = 5.54, SD = 1.27), and Grade 6

students (M = 5.48, SD = 1.28) in 5 SJN-CBE schools, Northern Shan State, Myanmar were high.

# Research Objective 2

The levels of academic achievement for learning and performance in integrated subjects of Grade 4 (M = 80.84, SD = 15.08), Grade 5(M = 83.37, SD = 17.06), and Grade 6 (M = 80.05, SD = 17.03), students in SJN CBE Schools, Northern Shan State, Myanmar were good.

# Research Objective 3

There was no significant relationship between students' self-efficacy for learning and performance in integrated subjects of Grade 4 students and their academic achievement in SJN-CBE Schools, Northern Shan State, Myanmar, r = .14, p = .117.

# Research Objective 4

There was a significantly, positively, and moderately strong relationship between students' self-efficacy for learning and performance in integrated subjects of Grade 5 students and their academic achievement in SJN-CBE Schools, Northern Shan State, Myanmar, r = .41, p = <.001.

# Research Objective 5

There was a significantly, positively, and moderately strong relationship between students' self-efficacy for learning and performance in integrated subjects of Grade 6 students and their academic achievement in SJN-CBE Schools, Northern Shan State, Myanmar, r = .53, p = <.001.

# Research Objective 6

There was a statistically significant difference in self-efficacy for learning and performance in integrated subjects among Grade 4, Grade 5, and Grade 6 students at SJN-CBE Schools, Northern Shan State, Myanmar, F(2, 430) = 5.00, p = .007.

# Discussion

Self-Efficacy for Learning and Performance in Integrated Subjects

According to the findings of this study, self-efficacy for learning and performance in integrated subjects of Grade 4, Grade 5, and Grade 6 students of 5 SJN-CBE Schools, Northern Shan State, Myanmar, was high.

Bandura (1997) stated that students develop their self-efficacy beliefs through the four sources of self-efficacy: mastery experience, vicarious experience, social persuasion, and physiological factors. According to Malone, 2018, in MTB MLE, students' prior knowledge and skills which they have learned from their parents' home and community are appreciated and valued. According to the common underlying proficiency, which examines the language transfer from L1 to L2, children's first language (L1) is an essential resource for learning other languages and for learning other academic subjects (Cummins, 2000). In the same way, the target education program and its schools' curriculum include well-balanced local, national, and global context and knowledge using learners' home language and mother language as the medium of instruction.

Learning in children's first language (L1) provided the young ethnic learners with opportunities to apply their prior knowledge and skills to build new knowledge and skills. Furthermore, unlike government schools, these minority children use their home language, or mother tongue (MT), as the first language for learning in school, and teachers share learners' language and communicate confidently and conveniently with their classmates and teachers in the language they speak in their daily lives. Therefore, the students went through mastery experiences by actively engaging in the teaching and learning process. These results build on existing evidence of physiological factors such as the effects of a classroom environment and students' mental state that could also affect the students' self-efficacy formation (Arslan, 2012; Bryant, 2017). This result aligns with the finding obtained by Premsrirat (2019), who discovered that the MTB-MLE students had shown signs of higher self-confidence, enabling them to communicate and engage in the learning process. This will help them gain a cognitive advantage in the future when they encounter new academic challenges.

Bryant (2017) noted that students also develop their self-efficacy beliefs through social persuasion by interacting with the individuals around them. For instance, constructive and helpful feedback from their classmates and teachers and verbal encouragement from their parents can raise students' self-efficacy. It was observed that teachers of the five target schools exercised constructive feedback with their students in the class and wrote narrative reports about their students' improvement three times a year, including a discussion section for each student with their parents. Therefore, students received constructive feedback from teachers and their parents. These could be why Grade 4, Grade 5, and Grade 6 students' self-efficacy for learning and performance in integrated subjects was high at the five research schools.

This study's findings revealed a significant difference between Grade 4 and Grade 5 students' self-efficacy for learning and performance in integrated subjects. The researcher discovered that Grade 5 students were more experienced and familiar with the tasks given in the integrated subjects class

compared to Grade 4 students in the phase of upper primary (Grades 4, 5, and 6) education as they are in the second year of the upper primary phase. This study may explain the difference between Grade 4 and Grade 5 students. Bandura (1997) stated that successful experiences over challenges reinforce the sense of efficacy, making students feel self-confident when confronting similar situations again.

In contrast, this study found that there was no significant difference in selfefficacy for learning and performance in integrated subjects between Grade 4 and Grade 6 students and between Grade 5 and Grade 6 students. The researcher discovered that the tasks given to Grade 6 students were more advanced and challenging than Grade 4 students and Grade 5 students. Also, the Grade 6 students were transitioning from childhood to teen years as they were12 to 13 years old. According to Bandura (1994), in terms of affective processes, human beliefs influence individuals coping with stress and negative mood when facing challenging conditions. The Grade 6 students were in the process of becoming teenagers, a life period that contains a fair amount of stress for those experiencing those life changes. The researcher believes that those mental and physical changes the Grade 6 students were going through could explain why Grade 6 students' level of self-efficacy for learning and performance in integrated subjects remains similar to Grade 4 and Grade 5.

# Relationship of Self-Efficacy for Learning and Performance in Integrated Subjects with Academic Achievement

The findings of this study reported that the relationship between self-efficacy for learning and performance in integrated subjects of Grade 5 and Grade 6 students and their academic achievement were significantly positively correlated. The findings also indicated that 17 % of the variance in Grade 5 academic achievement and 28 % in Grade 6 was accounted for by the effect of self-efficacy.

Several previous studies align with the current study, showing a relationship between self-efficacy and academic achievement. For example, Huang and Lynch (2017) discovered a significant correlation between students' selfefficacy for learning Chinese and their academic achievement in learning Chinese. Alexander and González (2018) also reported a strong significant relationship between students' self-efficacy and English academic achievement. The study of Perez and Ye (2013) is consistent with this study as it indicated a positive correlation between self-efficacy and mathematics achievement in lower secondary education students. However, the findings of this study reported that there was no significant relationship between self-efficacy for learning and performance in integrated subjects and integrated subject academic achievement of Grade 4 students. A study conducted by June and Eamoraphan (2018) also reported that there was no significant relationship between attitudes toward mathematics and mathematics self-efficacy with mathematics achievement of Grade 10 students at A Len Bum IDPs High School in Kachin State, Myanmar.

The current study found that the high self-efficacy of Grade 4 students did not reflect their success in learning integrated subjects. However, both the level of self-efficacy for learning and performance in integrated subjects and academic achievement were high. According to Bandura (1997), learners' academic achievement is mainly influenced by their cognitive abilities. However, academic achievement is also related to many factors. Students seemed motivated to learn this from other sources such as the learning environment, teaching method, parental encouragement, and students' interest in learning areas.

### Recommendations

Recommendations are provided for students, teachers, parents, implementers and administrators of SJN-CBE, and future researchers.

### **Recommendations for Students**

This research study revealed that Grade 4, Grade 5, and Grade 6 students had high self-efficacy for learning and performance in integrated subjects. To improve and strengthen their self-efficacy regarding challenging tasks or conditions, working with endurance and energy is recommended to cultivate their mastery experiences by observing other students and friends whom they see as role models to boost their vicarious experiences. They should practice giving and receiving constructive feedback from friends, teachers, and parents and measure their achievement in terms of self-improvement.

### **Recommendations for Teachers**

The investigation revealed that the Grade 4, Grade 5, and Grade 6 students had high levels of self-efficacy in learning and performance in integrated subjects. Teachers need to focus on maintaining and strengthening learners' selfefficacy for learning and performance in integrated subjects in the long term. Therefore, teachers should consider the four sources of self-efficacy when setting learning goals and objectives, lesson planning, and learning activities. Furthermore, teachers' practice of effective teaching and learning strategies, positive attitude and attributes, and growth mindset are also critical for the process of scaffolding the self-efficacy of students who are ethnic minority children.

# Recommendations for Parents

Proper and healthy parenting is critical. Therefore, it is recommended that parents assist in building their children's self-efficacy in diverse ways. Parents should ensure their children's physical and emotional health through proper nutrition and positive relationships within the broader family. Therefore, parents need to be conscious of their children's stress, emotions, and peer pressure, especially when the children are in transition to becoming teenagers.

## Recommendation for Implementers and Administrators of SJN-CBE

It is important to create a warm and friendly environment where students and teachers are physically and mentally secure and free from bullying regardless of gender or socioeconomic status. Uniqueness, diversity, and differences should be appreciated, not shunned, and positive discipline should be practiced so that students and teachers work together confidently and constructively. This may contribute to their self-efficacy-building process. Teachers need to be supported through good working conditions, including effective professional development through in-school workshops on diverse teaching and learning strategies, efficacy feedback, mental well-being, and stress management strategies. Implementers and administrators of the target schools must cooperate and collaborate well with parents to provide parenting education that will help parents better support their children's learning. Finally, implementers and administrators of the target schools must be mindful of whether the students and the schools' culture, environment, policies, and practices are relevant and supportive for enhancing the ethnic minority children's self-efficacy-building journey.

### Recommendation for Future Researchers

Future researchers interested in investigating students' self-efficacy for learning, performance, and achievement in mother tongue-based multilingual education (MTB-MLE) contexts may consider the following. They could investigate different learning areas in the MTB-MLE context, such as ethnic minority children's self-efficacy for learning and performance in English as a foreign language and Burmese (national language) as a second language. This would, in turn, help to have a deeper understanding of how self-efficacy influences second and third language learning in the MTB-MLE context. Future researchers could also consider comparing the self-efficacy of ethnic minority children from different educational contexts, such as students who learn academic subjects in their second or third language and first or home language. This will contribute to a deeper understanding of how language impacts children's learning for mother tongue-based multilingual education implementers and mainstream education implementers. Furthermore, the findings would contribute to advising and advocacy for language policy in the national education system.

Future researchers could consider conducting research regarding educational achievement in SJN-CBE schools through the assessment of quantitative data that will help understand the strengths and limitations in implementing the policy regarding pedagogical and professional development. This will help to identify the factors hindering or supporting MTB-MLE and the improvements required to respond more effectively to the needs of MTB-MLE.

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