

The Relation of the Teacher's Application of Providing Motivation on the Mathematical Achievement of Immigrant Students: A Case Study of Indonesian Schools in Sabah, Malaysia

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移民学生の数学の成績に対する教師の動機付けの適用の関係
— マレーシア、サバ州のインドネシア人学校のケーススタディ —

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Abstract

In an endeavor to provide an equal education to all Indonesian citizens, the Indonesian government established Community Learning Centers (CLC) for the children of Indonesian immigrants in Sabah. In addition, the Indonesian government launched a program to dispatch certified teachers to teach CLC students. However, teaching immigrant students is different from teaching students in general. In the case of CLC students, lack of motivation is a problem in teaching them, especially in Mathematics. Several previous studies have demonstrated that teacher who provides motivation will boost student performance. This study aims to observe the providing motivational activity employed by the teacher in the classroom and determine its relationship to the academic achievement of immigrant students using Levin and Nolan's (2010) learning design points as a reference. Mathematics was selected because it is a required subject on the national exam and a subject that CLC students could be better off compared to students in Indonesia. This study implements a quantitative approach, with 103 teachers as respondents and 999 students's test scores. The results of the study indicate a positive correlation between the providing motivational activities employed by the teacher in the classroom and student performance in Mathematics. Among eight activities that consisted in the providing motivational activities, three activities (student need, tension, novelty-variety) had a significant result in immigrant student achievement.

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1. Introduction

MOHR (Ministry of Human Resources) data shows Indonesians make up 40 percent of Malaysia's total foreign worker population, followed by Nepalese (22 percent) and Bangladeshis (14 percent). Indonesian immigrants are scattered throughout Malaysia in both the Peninsula (the area of Malaysia bordering Thailand and Singapore) and Borneo (the area on the island of Borneo bordering Indonesia and Brunei Darussalam). Sabah, a part of Malaysia located in Borneo, is the most common destination, followed by Selangor and Johor in the Peninsula, potentially indicating the high presence of irregular foreign workers in Sabah. Based on the records of the Consulate General of the Republic of Indonesia in Kota Kinabalu and also the Indonesian Consulate in Tawau, in Sabah, out of 53,687 school-age children, 28,831 of them do not have access to education due to the absence of official documents required as a condition for attending school in Malaysia by the Malaysian government. These Indonesian children are the children of Indonesian immigrant workers in Sabah, Malaysia (Ministry of Education, Culture, Research, and Technology, 2016).

The existence of national schools abroad has been around for a while. Some countries deliberately create national schools abroad to provide access to education for their citizens, such as Japan, Russia, and Italy. In the preamble of the 1945 Constitution, the Indonesian government aims to educate its citizens, which means that it is responsible for providing education wherever its citizens are. This is also supported by law number 20, 2003, which states that every Indonesian citizen is entitled to nine years of basic education.

Then through an agreement between the two governments in 2006, it was agreed that the Indonesian government could build an Indonesian school in the Sabah region called Sekolah Indonesia Kota Kinabalu (SIKK) or Indonesian Schools of Kota Kinabalu. However, not all Indonesian children in Sabah, Malaysia, can access SIKK due to distance constraints, especially children in oil palm plantations. So then, in 2011, the Indonesian government built Community Learning Centers as a branch school of SIKK (CLC KRI Tawau, 2020). Moreover, to provide the same quality of education as schools in Indonesia, the Indonesian government created a program to send professional teachers specifically to teach students in CLCs (Tohari, 2023). There are about 256 CLCs (data from SIKK, 2022).

In Malaysia, apart from SIKK and CLC in Sabah, the Indonesian government also built Indonesian

Table 1: Number of Students at Indonesian Schools in Malaysia, Elementary and Junior High School Year 2022

No	Schools Name	Number of Students
1	SIKL	308
2	SIJB	350
3	SIKK	572
4	CLC	18,209
Total		19,439

Source: Ministry of Education, Culture, Research and Technology (2022)

schools in other parts of Malaysia, which are Sekolah Indonesia Kuala Lumpur (SIKL) and Sekolah Indonesia Johor Bahru (SIJB). Here is the data on the number of students in 2022 for elementary and junior high school students studying in Indonesian schools built by the Indonesian government in Malaysia.

The number of students in CLCs is higher than in other Indonesian schools because CLC students are spread across many of the 256 CLCs. Moreover, unlike SIKK, SIKL, and SIJB, CLC has a unique condition where it can only be built in oil palm plantation areas as part of CSR (Corporate Social Responsibility) and registered with the Malaysian government as a non-formal school. Although CLCs are a branch school of SIKK which is registered as a formal school under the Indonesian Ministry of Education, Culture, Research, and Technology, CLCs have more flexible teaching materials and school management as well as shorter delivery times. In some CLCs, because they have to share the school building with Humana (an NGO school), they have to wait until Humana is finished or sometimes hold school activities outside the classroom (Tohari, 2022).

The characteristics of CLC students are also different from those of other Indonesian schools and even SIKK students despite being Indonesian immigrant children studying the same curriculum. CLC students live in a palm oil plantation environment so the economic background of the families is almost all the same, coming from low-skilled working families. According to Asrobudi (2018), parents of CLC students do not care much about their children's education. They are preoccupied with their jobs all day. Parents often send their children to work in the fields to support their families. Because their parents do not value education, CLC students born and raised in Sabah, Malaysia are expected to follow in their parent's footsteps and pursue careers as migrant laborers in Malaysia (Aswan, 2020). It is different from the students at SIKL, as seen from the study conducted by Setyani, et al. (2021) the parents of SIKL students provide support and are actively involved in their children's education.

Students at CLC have little to no interest in reading, are easily distracted, and shun any situation that requires them to perform under stress. They would not study because they feel that supporting their parents comes first and then school. They have a limited understanding of Indonesian culture and geography (Asrobudi, 2018). This characteristic of CLC students is also reinforced by the author's experience teaching in a CLC for 4 years, where students's motivation for education was shallow. Teachers had to encourage students to go to school actively. In a Tohari (2021) study, CLC teachers mentioned that most of their students came to school tired and needed to be more eager to learn. Students were also easily bored during lessons, so CLC teachers were required to organize the class well. Lack of parental support makes the role of the teacher in encouraging students to go to school vital.

Mathematics is one of the subjects that CLC students are not very interested in (Tohari, 2021). In the opinion of Attard et al. (2011), learning Mathematics has become very popular recently. Both educators and academics are paying close attention to how math is taught because mathematical development follows human technological requirements. In Indonesia, mathematics is a major

subject from basic through senior secondary school (Kamarullah, 2017). According to Law Number 20 of 2003 on the National Education System, Article 37 Paragraph 1 states that the primary and secondary education curriculum must include mathematics as a mandatory subject. The government always holds a mathematical national exam¹ to assess learning goals.

Huitt (2009) points out that the activities that occur in the classroom have the most significant impact on students's academic achievement. The teacher's function is essential in the educational process. Sanders and Rivers (1996) state that the most important factor in student achievement that can be attributed to the school environment is the presence of good teachers. As it correlates with student behavior and performance, Pantziara & Philippou (2015) argue that fostering an environment conducive to student motivation is critical to improving Mathematics education. In a time when student performance on standardized Mathematics tests is becoming a significant measure of how good a teacher or school is (Darling-Hammond, 2009), it is imperative to know how to take advantage of the good things about the Mathematics classroom environment and how to keep students motivated so that all students can do the best they can.

According to prior research findings, teaching immigrant students involves a different strategy since immigrant students have specific requirements distinct from those of the typical student (Cochran-Smith, 2000; Nieto, 2000). When instructing students who are immigrants, teachers should have information about how to teach immigrant children and be aware of the life experiences of the students they are instructing. It will help teachers better serve their immigrant students (Hilburn, 2014). Teachers who have a feeling of camaraderie and are attentive to the needs of their students tend to boost their students's enjoyment of learning, which has a beneficial influence on the results of their student's educational experiences (Good & Brophy, 1995; Hemke, 1990). Because of this, one of the most successful ways to raise student accomplishment is for teachers to give students the incentive they need to succeed. The question then becomes, how do CLC teachers encourage their students, and how does this influence immigrant students's academic performance?

This study covers how CLC teachers encourage immigrant students and offer an overview of how the efforts of teachers in providing motivation can increase student achievement in Mathematics. Using a quantitative approach this study's objective is to employ mathematical models, theories, and hypotheses pertaining to phenomena; explore the relation between teacher's activities in providing motivation and CLC student's Mathematical achievement. Essential points in providing motivation that can increase student achievement described by Levin and Nolan (2010) are used as a benchmark for CLC teacher strategies to motivate students and their relation to student achievement. The theory of Levin and Nolan (2010) explains is compatible with several studies regarding practical approaches to teaching immigrant children.

The findings of this research can serve as an insight for the Indonesian government, allowing them to improve the quality of education provided in Indonesian schools located in Malaysia, especially in Sabah since the number of CLC students is enormous compared to other schools and better understand the requirements of both students and teachers. In addition, very few studies

address topics related to immigrant students or school environments with a high proportion of immigrant students, and testing the existing theory in providing motivation in this context, will give value points to whether the theory worked or not. Hence this research is novel and unique in that it fills gaps in existing knowledge or adds to the body of previously accumulated knowledge.

2. Teacher's Role in Providing Motivation and Student Academic Achievement

Teacher's roles are crucial in creating quality education affecting the success of student development and achievement in schools (Széll, 2013). It has been demonstrated by Counts (1952) that the functions that teachers play in schools, which are seen as centers of transformation, are of the utmost significance. Gardner (1985) asserts that students are driven to study and accomplish when they believe their teacher cares about them. The characteristics of caring teachers include demonstrating a democratic style of interaction, assessing individual differences in student behavior, demonstrating an attitude of care toward their work, and providing advice and feedback.

Examinations and ongoing evaluations are the two most common methods of measuring student achievement in school, as stated by Ward (1996). There was a significant correlation between a person's intellect and their initial level of accomplishment in Mathematics, with motivation and cognitive methods accounting for further variation (Murayama & Houfe, 2012). Important theoretical predictions are supported by some of Gilbert et al.'s (2014) results providing empirical proof. The findings add to the literature by showing if students's beliefs that their teachers believe they can learn and understand Mathematics are positively related to their mastery goal orientations, performance goal orientations, and Mathematics utility.

Moreover, teacher's attitudes are more likely to influence the instructional approaches they employ in the classroom than their knowledge of a particular subject area or instructional procedures. This is because people's convictions tend to run deeper. Peterman (1993) and Tobin (1993) claim that teacher's classroom actions are the primary means through which their educational perspectives are given relevance.

To maximize student performance, teachers of Mathematics should make every effort to spark their students's interest in the subject during the year, with a particular focus on the needs of their female students. Atnafu (2012) explains that Mathematics teachers can do this in a variety of ways, such as by providing motivation, being clear about expectations, encouraging students to set manageable goals, offering verbal and written compliments, judiciously implementing assessments and grades, appealing to students's sense of mystery, exploration, control, and fantasy, surprising them on occasion, employing tried-and-true methods in novel ways, repurposing familiar materials in novel ways, applying concepts and principles in novel contexts, etc. In addition, according to Mojavezi (2012), teachers who always provide students's understanding with learning media that can attract students's attention will be easily remembered by students. Students who are allowed to actively think, participate in learning, and are given space to express themselves can make students feel influenced and have an excellent desire to learn (Stipek et al., 1998).

3. Teaching Immigrant Student

Baker (2011) found that teachers can be influential in teaching immigrant students when they have experience with them. They were usually familiar with the student's language and culture and understood the communities they served. He also concludes that teachers are working hard to integrate. Teachers who successfully teach immigrant students usually have high expectations for their student's learning abilities and outcomes. They believe that immigrant students can get the same achievements as students who are not immigrants. Some teachers also dismissed the stigma that by making them adapt to the surrounding culture, their academic performance would be affected due to non-conformity with their socio-culture (Hakuta et al., 2000; Garcia, 1988, 1991). To improve student achievement and achieve educational goals, teachers who teach immigrant students will usually constantly monitor each student's development, provide the feedback needed by students to develop, and conduct evaluations to find out what needs to be developed (Garcia, 1988; Carter & Chatfield, 1986; Calderon et al., 2011).

According to Cruickshank (2003), four things that promote the schooling of immigrant students are (i) how to improve access for minority-based students, (ii) suitable types of distribution and systems, (iii) a structured curriculum with separate student assistance services, (iv) incorporating share clauses into the institutional system. According to other research, when teachers promote a learning environment, newcomers can feel better and more motivated to learn (Katz, 1999). The learning environment here means that the teacher tries to get along with students and creates a situation where students can learn comfortably. Also, to push the boundaries of textbooks, teachers can use immigrant students' knowledge and life experiences to teach in the classroom (Hilburn, 2014).

As described by Cochran-Smith (2000) and Nieto (2000), many researchers assert that teachers may believe that immigrant children's behavior is proper and reasonable that teachers are unaware of what immigrant children actually need. Teachers must manage heterogeneity in their student's abilities and their students' nature and learning approach constructively (OECD, 2004, p.154)

In students' learning, academic motivation is a fundamental thing. Teachers who are friendly and needed by students can increase student satisfaction with learning (Good & Brophy, 1995), leading to higher achievement levels (Hemke, 1990). Research on Mathematics achievement in Canada helps teachers generate student interest in Mathematics, demonstrate relevance, and increase success expectations by providing feedback to the students (Burden, 1995).

From case studies similar to the situation of Indonesian schools abroad, cases in Japanese schools in London and Catalonia show that teachers who can teach well are teachers who understand the culture and reform how to teach with consideration to understand more in cultural background and communication (Sato, 2007), in addition to paying attention to student interests (Fukuda, 2018). Various studies on teaching immigrant children effectively can be seen in the table below.

Table 2: Previous Studies on Teaching Immigrant Children

No	Author	Results (Activities Conducted by Teacher Effectively Teach Immigrant Students)
1	Baker (2011), Sato (2007)	Understand the students's culture and language, have a high expectation to students's success
2	Hakuta, et al. (2000); Garcia (1988, 1991)	Provide their students's need especially to adapt in the environment
3	Garcia (1988); Carter and Chatfield (1986); Calderon (2011)	Encourage students and give feedback
4	Katz (1999), Hilburn (2014), OECD (2004), Fukuda (2018)	Construct good environment where teachers and students get along together with student interest
5	Burden (1995), Good & Brophy (1995), Hemke (1990)	Provide feedback, teachers who are friendly and needed by students can increase students's satisfaction in learning

Source: Made by Author

4. Providing Motivation Activities by Levin and Nolan (2010)

The results of several previous studies on teaching immigrant children show how the teacher's role in providing motivation is vital. Teachers' activities that are successful in motivating students are primarily included in the motivational activities described by Levin and Nolan (2010). A detailed explanation of this theory is as follows.

Levin and Nolan (2010) categorize eight things teachers can do to increase student motivation and achievement effectively.

1. Student's interest. Teachers can link material with things that interest students to increase student motivation.
2. Student's needs. Fundamentally, every human being has basic needs. When teachers can meet the students's basic need such as self-acceptance, protection, and freedom of opinion, students will automatically be motivated to learn.
3. Novelty-variety. Students's focus will increase when the teacher plans and creates material in a unique, new, and varied way. Human's attention will remain focused when he finds an exciting activity.
4. Success. The teacher must increase each student's chances to succeed in an activity as much as possible. When students succeed in doing tasks that they find challenging, they will have confidence and motivation to learn more. Therefore, it is better if the teacher provides detailed, easy-to-understand, and straightforward instructions so all students can follow the lesson well and complete their assignments.
5. Tension. In the learning process, tension is required because the tedious learning process will make students feel bored quickly. Anxiety and fear make students focus on the teacher's explanation. For example, the teacher can suddenly give random questions to students.
6. Feeling tone. Feeling tone refers to the mood or environment of feeling in the classroom. The sound of emotions in class can be highly optimistic, mildly positive, neutral, moderately

negative, and very harmful, according to Madeline Hunter (1982), and can help students become more relaxed and able to concentrate more on learning tasks.

7. Feedback. Feedback is used to measure student's performance and appreciation, increasing student motivation. Teachers who never provide feedback will make students lazy in doing assignments.
8. Encouragement. Encouragement is a form of teaching hope and trust in the student's abilities and showing respect to them. Encouragement emphasizes the positive aspects of teachers to students.

These eight activities of providing motivation, described by Levin and Nolan (2010), are used as a reference in formulating the activities carried out by CLC teachers to motivate their students in this research.

5. Research Design

5.1 Data Instrument

This study uses a quantitative method with a survey as the instrument for data collection as well as secondary data. This study used a questionnaire to find out how giving motivation to the teacher affects how well immigrant students do in school. The survey was used to determine how teachers feel or think. For this research, a survey form from SurveyMonkey was used. Nevertheless, a paper questionnaire was used in places where the internet connection was unstable.

The questionnaire addressed the research objectives based on Levin and Nolan's (2010) theory of effective strategies for giving motivation and its relation to student academic achievement. This theory is used to design the questions for the questionnaire with the Likert scale model. Basically, the content of the questionnaires is about the frequency of teacher activities in providing motivation to their students. Secondary data in this study is the 2019/2020 academic year ninth-grade student Mathematics test scores from SIKK were used to better understand the relationship between how a teaching method is used and how well a student does in school.

5.2 Sample Site

The Indonesian government assigned a liaison coordinator (LO) to supervise, evaluate and mediate between CLC teachers and related parties. The LO's working area is divided into four areas, and there are around 10-20 CLCs in each area, namely Kota Kinabalu, Sandakan, Lahadatu, and Tawau. This research took a sample of CLC from the four areas of the LO. The total number of CLCs in the sample is 42 CLCs.

5.3 Sample Size and Sampling Method

Random sampling was used for collecting data. Teachers and students from 42 CLCs were chosen as participants. Because most CLC teachers teach multi grades, the teacher respondents were limited to the teachers who are teaching 9th grade. The link to the online questionnaire was

Figure 1: The Map of the Sample Site



Source: from Google modified by Author

Table 3: List of CLC's Name

Name of Area	Name of CLC	
Kota Kinabalu	1. Kota Kinabalu 2. Keningau 3. Nabawan	4. Bingkor 5. Kundasang
Sandakan	1. Pamol 2. Genting Suan Lamba 3. Genting Mewah 4. Gamore 5. Sapi 2 6. Prolific	7. Ribu Bonus 8. Melangking 9. Luang Manis 10. Pontian Hilco 11. Terusan 2 12. Kertam Sepagaya
Lahad Datu	1. Pontian Fico 2. Pahang 2 3. Genting Tanjung 4. Borneo Smaudra 5. Syarimo 6. Tomanggong	7. Jeroco 8. Permodalan 9. FGV 10. Sabah Mas 11. Litang
Tawau	1. Jeleta Bumi 2. Baturong 3. Pegagau 4. Al-Alaq 5. Balung River 6. Sungai Balung 7. Holy Trinity	8. KL Kepong 9. Kertam Kelabakan 10. Bombalai 11. Merotai 12. Mostyn 13. Segaria 14. Giram

Source: Made by Author

distributed to four liaison coordinators in four areas. These liaison coordinators then shared the link with the teachers under their work responsibility. It took around four weeks to get the answer from teachers due to the fieldwork condition where most areas have difficult access to the internet. The total number of participants is 103 teachers.

5.4 Data Analysis

This study uses multiple regression analysis, it is a statistical analysis technique used to examine the relationship between a dependent variable and multiple independent variables. Multiple regression is an extension of simple linear regression, where only one independent variable is considered. In this research, the independent variable is 8 activities in providing motivation (X), while the dependent variable is CLC students's achievement (Y).

5.4.1 Dependent Variable

This research's dependent variable is student achievement which is the Mathematics test score in the final exam for 9th-grade students. The test scores used were from the academic year 2019/2020.

5.4.2 Independent Variable

The independent variable is the teachers's behavior which in this study is the way teachers provide motivation. Providing motivation, explained by Levin and Nolan's theory (2010), consists of 8 types of activities. The questionnaire asked whether the teacher did these types of activities and the frequency of them. Furthermore, the teachers's answer is used to identify the effect of providing motivation to the students's Mathematics test score.

5.4.3 Other Variables

As mentioned in the previous study, many factors determine students's achievement, especially for teaching immigrant students. Factors such as students's age, students's gender, teachers's age, teachers's gender, teaching experiences, and teacher training are considered. To have more specific and accurate results, in this research, those factors are also put as variables control, especially to see the connection between providing motivation methods and students's academic achievement.

5.5 Analytical Framework

Multiple regression is used as a method to analyze, where in the general basic model for multiple regression as following.

$$y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_p x_{ip} + u$$

y_i : Test Score;

β_0 : y-intercept;

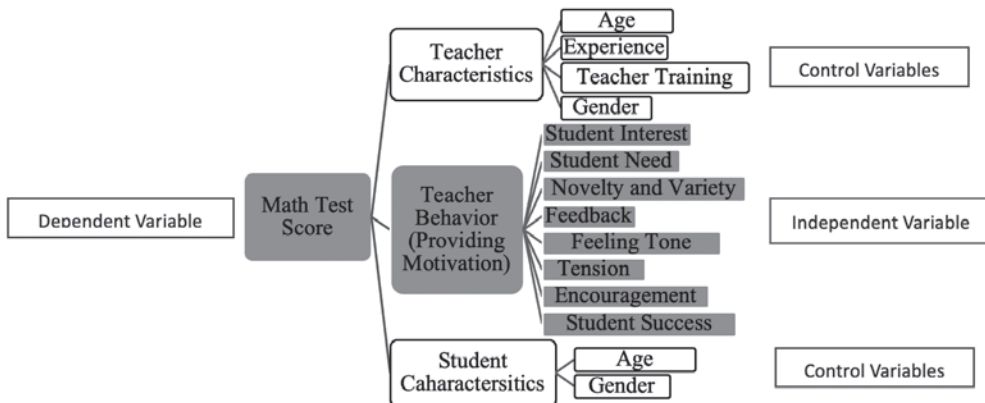
β_1 : gradient of the line

x_i : provide motivation

u : error term

The analytical framework describes the connection between providing motivation and students's academic achievement, as shown in Figure 2.

Figure 2: Analytical Framework



Source: Made by Author

6. Findings

6.1 Basic Information of Respondents

The table below will give statistical descriptions for the basic information of the teacher respondents.

Table 4: Summary Data of Teacher Basic Information

Information	Obs	Mean	Std. Dev.	Min	Max
Gender	103	1.398058	.4918912	1	2
Age	103	2.427184	.7488808	1	5
Experience	103	4.262136	.8239281	2	5
Training	103	3.38835	.6602586	2	4

Source: Made by Author

On average, most respondents are male teachers. These teachers are around 26-30 years old. There are no respondents who do not have teaching experience; on average, the teachers have teaching experiences for around four years and above. While teaching at CLC, the CLC Teachers have received teacher training at least once or twice.

6.2 General Trend

Table 5 outlines, from the perspective of the teacher, the frequency with which various activities serve to motivate the students. It is possible to get the conclusion that CLC instructors do, in most cases, 'give incentive.' The vast majority of educators choose "5" to indicate that they always do "provide motivation" or that they use these sorts of activities 100 percent of the time.

In addition, CLC teachers have a tendency to encourage their students to participate actively in class since the 'encouragement' activity had a greater number of responses in the range 5 than any other activity.

Table 5: Frequency Provide Motivation Activities from Teacher's Point of View

Name of Activities	Frequency					Total Respondent
	1	2	3	4	5	
Student Interest		1	12	48	42	103
Student Needs		30	43	28	2	103
Novelty and Variety			6	35	62	103
Success			10	41	52	103
Tension		3	20	51	29	103
Feeling Tone		1	5	48	49	103
Feedback			5	22	76	103
Encouragement			1	22	80	103

Source: Made by Author

(Range 1 to 5. 1: never (0%), 2: rarely (30%), 3: often (50%), 4: usually (70%), 5: always (100)).

7. Analysis and Discussion

7.1 The Relation between the Application Provide Motivation Activities by Teacher and Immigrant Student's Academic Achievement

According to table 6 in model 1, which focuses only on the association between teacher actions in providing student motivation and math results, the number of students who a teacher stimulates to participate in teaching and learning activities will go up by 0.582. If the p-value is less than 0.05, then the significance between giving motivation and student math results is shown by a sign with a double asterisk (**).

Then, in the second model, the control variable, namely student characteristics, in this case, age and gender, is added. This second model compares not only the factor of the teachers's activities in providing motivation but also the factor of students. It is clear that even in this particular scenario, the supply of motivation continues to have a major influence on the mathematics achievement of students. It is feasible to notice the same thing in models 3 and 4, where there is a positive association between the supply of motivation and the achievement of students. The CLC students's mathematics scores will improve according to the frequency of which their teachers incorporate motivation into mathematical teaching and learning activities. The following displays the outcome of multiple regression applied to the score obtained on the mathematics exam.

According to Burden (1995), providing motivation is essential for students, mainly immigrant students; his study cases in Canada showed results that to raise student achievement in Mathematics, the teacher should arouse their students to be more eager to learn Mathematics. In the case of CLC students who lack motivation, by looking at the quantitative result, it can be assumed that teachers who provide motivation can increase their immigrant students's performance. Students are more likely to be successful in school if they feel valued and appreciated by their teachers (Good & Brophy, 1995; Hemke, 1990).

Table 6: Result of the Multiple Regression for Provide Motivation to Mathematics Test Score

VARIABLES	(1) model1	(2) model2	(3) model3	(4) model4
Provide Motivation	0.587** (0.252)	0.598** (0.250)	0.600** (0.250)	0.605** (0.254)
Student Gender		0.685*** (0.178)	0.644*** (0.179)	0.637*** (0.179)
Student Age			-0.133* (0.0779)	-0.126 (0.0778)
Teacher Gender				0.418** (0.190)
Teacher Age				0.0417 (0.132)
Teaching Experience				0.328*** (0.121)
Teacher Training				-0.0759 (0.137)
Constant	77.80*** (1.087)	77.40*** (1.085)	79.52*** (1.650)	77.99*** (1.738)
Observations	999	999	999	999
R-squared	0.005	0.020	0.023	0.036

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Source: Made by Author

Although it has been proven that giving motivation has a beneficial influence on the learning accomplishment of the immigrant students in Mathematics, the case study at CLC shown in Table 6 also demonstrates that providing motivation is not the primary component in boosting students' learning. There seems to be a correlation between the gender of the students and their level of academic accomplishment in mathematics. When it comes to the features of the teacher, teaching experience is another factor that has a big impact on the degree to which students succeed in mathematics. Concerning this topic, further research is required.

7.2 The Relation Between Each Activity of Provide Motivation Conducted by Teachers and Immigrant Student Academic Achievement

According to Levin and Nolan (2010), eight activities are believed to promote students' academic achievement. Those activities are related to students' interest, need, novelty-variety, success, tension, feeling tone, feedback, and encouragement. This section explains the relationship between those activities to students' academic achievement.

In the case of CLC students, from the statistical result (Table 7) in model 1, among eight activities in providing motivation, two activities have highly significant results in p-value <0.01. Those two activities are students' needs and tension. If teachers fulfill their students' need and give

Table 7: Result of the Multiple Regression for Each Provide Motivation Activity to Mathematics Test Score

VARIABLES	(1) modell1	(2) model2	(3) model3
Student Interest	-0.113 (0.157)	-0.0974 (0.156)	-0.0803 (0.159)
Student Needs	0.808*** (0.201)	0.777*** (0.200)	0.540** (0.226)
Student Success	-0.0330 (0.154)	-0.00768 (0.153)	0.0430 (0.164)
Tension	-0.373*** (0.137)	-0.381*** (0.136)	-0.315** (0.148)
Feeling Tone	0.0547 (0.194)	0.0523 (0.193)	0.0470 (0.194)
Novelty and Variety	0.365* (0.201)	0.338* (0.200)	0.433** (0.204)
Feedback	-0.0579 (0.198)	-0.0439 (0.196)	-0.101 (0.210)
Encourage	0.269 (0.228)	0.290 (0.227)	0.218 (0.229)
Student Gender		0.643*** (0.179)	0.643*** (0.178)
Student Age		-0.119 (0.0778)	-0.117 (0.0780)
Teacher Gender			0.285 (0.219)
Teacher Age			0.0334 (0.140)
Teaching Experience			0.297** (0.129)
Teacher Training			0.0321 (0.150)
Constant	76.33*** (1.209)	77.82*** (1.744)	76.84*** (1.829)
Observations	999	999	999
R-squared	0.025	0.042	0.048

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

tension in the teaching and learning process, the Mathematic test score will be increased. Novelty-variety activity in p-value 0.1 also shows significance but not as high as the other activities. From this statistical data, it can be assumed that three activities that provide motivation influence the Mathematics test score positively. When the teachers usually do one of three or all activities, the students will obtain a higher score.

“Student’s Need” has the greatest influence on the academic success of immigrant students, as compared to the other two activities. This study provides more support for Levin and Nolan’s (2010) contention that at their most fundamental level, all human beings have certain requirements. Students will be naturally motivated to study as soon as their teachers are able to address basic student needs such as self-acceptance, safety, and the ability to express their opinions. In addition, when individuals are engaged in a task that they find engaging, their attention spans may be astonishingly extended. However, there should also be some level of tension in the classroom since students will rapidly get bored if the process of learning is too monotonous. Students are driven to concentrate on the teacher’s explanation when they are feeling nervous or anxious. Despite the fact, novelty and variation may provide a refreshed take for students on anything they are learning.

8. Conclusion

The importance of motivation to students’s accomplishment, particularly academic achievement, has been the subject of several studies. The studies that were done on educating immigrant students showed not only how teachers who were successful at teaching immigrant students did it but also the qualities of such teachers. This study investigates applying a technique that Levin and Nolan (2010) developed to provide motivation to the setting of CLCs in Sabah, Malaysia, which has a circumstance in which all its students are immigrants.

As can be observed from the outcome and the conclusion, teachers at the CLC offer their students the incentive they need to succeed. According to the responses, the majority of teachers (70%) are successful in providing motivation. Most teachers try to inspire their students and encourage them to participate in class activities by motivating them. As a response to this question, based on the statistical measurement, there is a relationship between supplying students with motivation and the academic accomplishment they attain in Mathematics. The more that the teachers motivate their students, the higher the level of action that will result in. Eight different activities might provide motivation, but only three of them—student need, tension, and novelty-variety—significantly boost student performance.

The results of this study illustrate that for cases with a large population of immigrant students who lack motivation to study, in teaching Mathematics, the teacher will be more effective in increasing students’s achievement by providing routine motivation. This study’s result adds evidence and explanations from quantitative approaches to existing studies that when motivation is provided, students’s academic achievement improved. In addition, in teaching Mathematics it is necessary to see the factor from immigrant students itself in this case students’s gender. Further study needs attention to this matter. Teachers at CLC also should pay attention to what kind of activities which would provide motivation that has an effect in promoting student’s Mathematical achievement.

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¹ In Indonesia called Ujian Nasional (UN)

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