ENHANCING STUDENTS` LEARNING INTEREST: LEARN FROM JAPANESE SCHOOL SYSTEM`S MOTIVATIONAL TECHNIQUES

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ABSTRACT

This paper defines and classifies motivation as intrinsic and extrinsic and recognized the necessity of both internal and external factors in facilitating learning interest, depending on students' individual needs. Particularly, it highlights various motivational techniques, an outcome of what had been observed in the teaching and learning practices in Japanese schools. Factors that were believed to have influence Japanese students' motivation to learn were also identified. Likewise, issues confronting the Japanese Educational System on its effort to promote motivational policies are as well tackled. Some studies on the relationship between motivation and academic achievement were also verified and results show that there is a positive correlation between the two variables involved.

INTRODUCTION

Tryon Edwards, an American theologian once said "To waken interest and kindle enthusiasm is the sure way to teach easily and successfully." This simply implies that one key to successful teaching lies in making learning tasks creative and meaningful.

This is where the moving power of motivation comes in. The effectiveness of learning depends upon proper motivation [12]; therefore, every learning activity must be properly designed to suit to the needs of every learner. In so doing, students` interest and enthusiasm will be aroused, thus making them an active partaker in the learning environment.

Motivation is a significant predictor of academic performance [41]. Therefore, it is strongly believed that motivation plays an important role on Japanese students` academic learning, as manifested by their excellent performance in international mathematics assessments and competitions.

The question here is how to get students more interested and involve in math. Since mathematics is often perceived by most students as difficult and boring subject, motivating students in this area is a fundamental challenge among educators.

Hence, this study was conducted to find out what motivates Japanese students to learn; also to discover varied motivational techniques a Japanese teacher employed to maximize learning. Moreover, from valuable insights gained from this study, it is hoped that Filipino educators may find these techniques beneficial in dealing with the challenge of motivating students not only in mathematics but also in other subjects. Likewise, this study will further confirm the belief that through enhancing students` interest to learn will pave the way to academic success.

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DEFINITION

The term motivation is often used to denote spring of actions, they maybe native or acquired. It means causing or inducing movements. Motivation is simply the moving power that elicits vigorous efforts to learn or to do things. It is also used to mean stimulation of a desire on the part of the learner to learn. In general, motivation provides the energy for learning to occur [12].

There are two types of motivation generally known in education, the intrinsic and extrinsic motivation.

Intrinsic motivation is one which is based on fundamental needs and drives and which will arouse the learners` innate desire to act. Some common forms of intrinsic motivation are the desire to gain knowledge, the desire to explore and the desire to construct. The students are not motivated to work for glory and honor but for personal satisfaction attendant to accomplishment [35].

Lepper [26] further states that a student who is intrinsically motivated undertakes an activity "for its own sake, for the enjoyment it provides, the learning it permits, or the feelings of accomplishment it evokes."

Extrinsic motivation is something external and is based on incentives designed to make learners more responsive than when they are left without them. The effect of such incentives varies according to sex, age and mental ability. For instance, an inspiring word may spur the more ambitious ones to work harder while the same will not even move the less capable. Incentives like scholarships, medals and honors will stimulate learners to do well. However, this type of motivation should not be too emphasized to become the be-all and end-all of learning [35].

Praise and blame, rivalry, rewards and punishments are some of the common types of extrinsic motivation [11]. Accordingly, Lepper [26] shares his view that an extrinsically motivated student performs "in order to obtain some reward or avoid some punishment external to the activity itself".

In support to the preceding definitions, Kaplan and Oudeyer [20] presented an example which states:

> For instance, a child that does thoroughly his homework might be motivated by avoiding the sanctions of his parents if he would not do it. The cause for action here is clearly external, and the homework is not done for its own sake but for the separate outcome of not getting sanctions. Here the child is extrinsically motivated.
>
> On the other hand, it is possible that a child could do thoroughly his homework because he is persuaded that through the skills gained, it will help him get the job he dreams of, later when he will be an adult. In this case, the cause for action is internally generated. It is also possible that a child does thoroughly his homework for the fun of it, and because he experiences pleasure in the discovery of new knowledge or considers for example solving a math problem is just as fun as playing a video game. In this case, his behavior is intrinsically motivated.

Now, it is obvious to note that different learners are motivated in different ways. While some students are very willful and may not need a great deal of guidance from the teacher, others on the contrary feel unsure of themselves that they need to be guided and consistently encouraged.

The concepts of intrinsic and extrinsic motivation help educators understand the basics of why students do what they do and how they can help them to do better [40]. Therefore, this study considers the necessity of both intrinsic and extrinsic factors in facilitating

students' learning interest. As Sternberg and Luhart [39] pointed out that most successful people are motivated by both internal and external factors and suggest that educators build on both types when working to engage students more fully in school.

MOTIVATIONAL TECHNIQUES THAT HELP BOOST STUDENTS` INTEREST TO LEARN

There are several factors, both intrinsic and extrinsic, that motivate learners and the factors can differ significantly from student to student. Nonetheless, the indispensable role of a teacher in the learning process is greatly considered. Along with their influential function, teachers tend to explore for some ways on how to maximize learning effectively. Through teachers' daily encounter with the students and with their keen observation of the things that transpired in the actual learning situation, various motivational techniques had been initiated to better facilitate learning. Eventually, teachers consider its importance as guide to successful teaching.

Christina Laun [25] on her article on Motivational Techniques offers suggestions on how to make classes more engaging that can encourage students to work harder at learning. Based on the list of techniques presented, the authors take from it specific motivational techniques then relate to it the details of what had been observed in Japanese schools setting. Those techniques served as basis to present facts how Japanese educators utilize it in an aim to motivate the students.

MOTIVATIONAL TECHNIQUES (Suggestions from Christina Laun)	OBSERVATIONS FROM TEACHING-LEARNING PRACTICES IN JAPAN
1. Focus on the importance of the subject. You may get students to take a lesson more seriously if you emphasize the importance of the subject, whether in the general scope of things or to their personal career or educational goals.	When students find the relevance of the subject they feel motivated to learn; otherwise, feel less interested in learning subject that don't seem to apply to their everyday life. The survey of MEXT conducted in 2002 revealed that only 39.6% of the Japanese students believe that mathematics is important [47]. But whether they believe in its importance or not, they are left with no choice but to study it if they desire to pass entrance examination to enter university [17]. Thus, teachers emphasize this idea to students. The demand of studying mathematics for entrance examination provides special motivation for study. Students know that their scores on high school and university entrance examination will strongly influence their future life path.

2. Pose problems to engage the class. Posing problems to students about the subject is one way to get them active and engaged in the learning process. It also forces them to think about a topic rather than just accepting it at face value.	A majority of Japanese teachers reported that fostering mathematical thinking was the main goal for their lessons.“ Mathematical Thinking” transpires when they emphasized students` exploration, development, and comprehension of mathematical concepts, or the discovery of multiple solutions to a problem [38]. Based from class observations, it was noticed that Japanese teachers do not directly provide the correct answer to the problem presented; instead they guide first the students then give them considerable time to think by themselves to discover related mathematical concepts and reasoning. Teachers also encouraged the class to think of as many ways to solve the problems as possible. In some instances, teacher presents materials as a sort of puzzles and brainteasers, this in turn spark students` curiosity in the subject matter and made them to participate actively.
3. Use visual aids. Visual aids can be a great way to show students how a concept works, where things fit into the world or what history looked like, all while making them more interested in the topic at hand.	Psychologists have long recognized the importance of concrete illustration in teaching [12]. In mathematics classes; diagrams, charts, graphs, geo boards and pattern blocks were utilized to facilitate students understanding of the topic being discussed. Video presentations, calculators and computers were utilized as well. Teachers consider those as good devices in representing mathematical facts. Japanese classrooms utilize those various creative teaching materials and aids to enable students to experience the benefits and fun of mathematical ways of thinking and to cultivate a strong sense of quantities and figures in students [13].

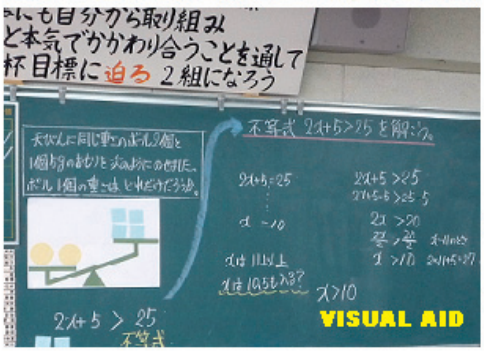
4. Make your classroom learning oriented. Try to create a classroom that is conducive to learning. Sometimes this will mean arranging desks in a certain way, closing the blinds so students can focus or posting relevant information and posters on the wall.	Japanese classrooms are guided by class objectives. The objectives can be slogans or mottos for each student who belongs to the class. These are exhibited primarily in the form of posters posted on the wall above the blackboards or at the most noticeable places inside the classroom as reminders to teachers and students. It has an important role in maintaining group order and in motivating students to study. Furthermore, an orderly and well-structured Japanese classroom where good physical set-up is maintained through appropriate seating arrangement and having a well-lit and ventilated setting offer a favorable atmosphere for teaching and learning.
5. Give students jobs around the classroom. When students feel they are an active part of the classroom and that they have responsibilities it gives them the sense that they matter. Students with more confidence and self-esteem may feel more motivated to learn and be more successful.	This motivational tip is supported by having "class activities" as part of the special activities in the Japanese education curriculum. Class based activities are made by assigning work to individual students like serving school lunch, hygiene and attendance check, cleaning the classrooms and performing the day duty tasks. The day duty is a role assigned to a student to lead the classroom for the day. Students take turn in doing these tasks. Moreover, from observation in high school mathematics classes, students do individual and group reporting of the topics assigned to them in front of the class. Through this involvement students enhance their self-esteem and boost their confidence.
6. Give praise. If a student has done a good job make sure to recognize it through praise, whether written or verbal. This can motivate students to try hard in the future.	Giving praise is evident in Japanese classroom. Teachers give compliment to students upon accomplishing something. They say good things about the work and give necessary follow-up on every task that has to be done. Aside from the teacher, their classmates do give praise as well. It was observed that students clapped their hands to acknowledge the effort done by their classmates after sharing their ideas or by answering problems posed by their teacher. Positive comments earned by students also build their confidence and self-esteem.

7. Summarize. It can be useful to some students to have a summary of what they learned at the end of the lesson. This can help show them how much they've accomplished and is good way to refresh their memories of the topics that were touched upon.	This motivational technique is very apparent in Japanese classroom. “Summing Up” or“Matome” in Japanese is considered as an indispensable element in mathematics lesson [37]. It is defined as an event in which the teacher talks to the whole class to highlight and summarize the main point in the lesson. As based from observation, the teacher asks some students to share what they had learned in the lesson. Students` solutions to problems are carefully reviewed as well. Also for clarity of ideas, the teacher clearly writes on the board the main points and key mathematical terms mentioned. “ Matome” is typically done at the final phase or sometimes at the middle of the lesson.
8. Take field trips. Taking field trips to places where students can see their lessons in action can be a great way to make learning more fun and exciting for students and encourage them to learn more about all kinds of topics.	Under the Japanese School Life and Culture having school excursions and taking field trips were included under the school events [4]. The elementary and junior high school curriculum recognizes the value of fun and interaction by allowing time for socialization and non-academic activities. Students visit museums, aquariums, prefectural offices and other industrial and commercial facilities as part of their exposure to the real world. Through this activity students deepen their understanding of community characteristics and modern society.
9. Promote teamwork. Most students feel energized and motivated when they get to work with classmates on lessons and projects. Allow students to work together to foster a sense of teamwork and to get them excited about learning.	Using teamwork in studying mathematics makes the lesson more exciting and interesting [26]. At Japanese elementary school pupils also play and learn through teamwork. Like for example in adding two 1-digit number in the first grade, each member of the group of pupils play the game by throwing dies and then recording the resulted number and their sums in the worksheet. After the activity, the teacher discussed with them the meaning of addition. Pupils in this situation were also having fun while learning. Using teamwork technique involves students in real learning situation.

10. Use group cooperative goals to maximize student involvement and sharing. Students may be more motivated to work if you allow them to work together. Working with their friends and classmates can be more fun and can help them get more excited about projects and topics they otherwise wouldn't enjoy.	This technique is reinforced by Japanese classroom motto such as: " If there is good thing to do, all of us will do it together." Individual students feel motivated to learn when they identify with class goals [50]. It was observed in Japanese mathematics class that the spirit of cooperation prevails. When given seatwork, students who finished ahead solving the problem helped their classmates to further understand the concept. Learning how to interact with others is important to the Japanese that they consider it a form of studying. The Japanese classroom's competitive but cooperative atmosphere serves to motivate all students to learn from their classmates. This is an affirmation for the high value that Japanese society place on harmony in personal relations and the ability to cooperate with others.
11. Organize. Good organization in your classroom is key to keeping things running smoothly and reducing the amount of clutter that can distract students from what they should be paying attention to.	Student monitors are an important part of Japanese classroom management. Teachers delegate much responsibility for classroom management and discipline to the student themselves [16]. Each day or two, a different pair of student is in charge of calling class to order, assisting the teacher in administrative tasks, and encouraging school discipline. The monitor role is rotated frequently to give opportunity to every student to experience first-hand understanding of the importance of cooperation and mutual effort in achieving a smoothly-run classroom.

12. Explore the connection between lessons. Capitalize on the interest students have had in past lessons by relating new topics to older ones. This also helps students see how topics fit together and gives them an overall picture of the subject.	This technique is evident in one mathematics class that the authors observed. It was noticed that before the teacher presents his lesson on solving linear inequality, he presented first one problem on linear equation, and allowed the students to recall the concept of that topic then let them solve it. After that, he made use of that concept as a springboard for discussion on solving linear inequality. This process of connecting ideas of the previous topic to the present one, usually occur on the review part of the lesson. And this is believed to have a good effect on the mastery of the subject matter.
13. Don't make it all about grades. Ensure that students don't feel that grades are the ultimate markers of their success or failure. Provide them with praise or rewards for hard work and effort as well as to encourage them to keep trying.	Japanese viewed that any child can master the curriculum if he or she tries hard enough [33]. This is probably the reason why Japanese emphasizes more on effort over ability. In Japanese elementary and junior high school, teachers provide equal educational opportunities for all children. All students are considered equally capable but differently motivated. Because of this underlying belief, Japanese instructors place strong emphasis on individual effort and hard work. Poor academic achievement is generally attributed to luck of effort rather than a lack of ability. [1] While acknowledging the performance of high-ability students for getting good grades, teacher recognized low-ability students' effort as well. By stressing effort, the low grades obtained in math for example, is interpreted as markers indicating that students need to work harder.

14. Do experiments/ Explore. Showing students examples of how things work through experiments where they can work hands on can help make them feel like they're an active part of their learning experience and motivate them to ask questions and investigate.	In mathematics lesson, there are various opportunities where a student can do exploration and hands-on discovery to verify how a certain idea works. Japanese educators really applied this technique in their mathematics lessons. For instance, in one observation of the geometry class; the teacher gave tasks to students to explore and make a regular tetrahedron out of an envelope. Students then perform it and by applying the ideas learned on the relationship between the angles and sides of the triangle they establish a proof underlying its construction. This practical activity, indeed, encourages active student involvement and participation.
15. Supporting students in their efforts to learn. No matter what, supporting your students as they go through the lesson is essential to their and your success in the classroom. Ensure that all students feel supported and motivated.	In a mathematics classroom setting, it is typical to see a Japanese teacher who squats in front of his students to see to it that they understand the concept and give further support for students who find any difficulty. Teacher also delivers his lesson in a friendly manner, allowing a comfortable learning environment for students to freely express their views and ideas. The moral support that the teacher provides offer great benefits for students' personal and academic development.



INFLUENCING FACTORS THAT MOTIVATE STUDENTS TO LEARN

Motivation is an integral component of instructional strategies that have been noted to have a positive impact on student learning. Aside from motivational techniques that a teacher utilizes, other predominant factors are as well believed to influence students' learning interest. By trying to understand why Japanese students do perform better academically, a number of factors are considered.

Desire for Better Career Opportunities - Passing the high school and university entrance examination has been the major motivational factor for learning among Japanese students, since the possibility of finding a good job in the future depends on the school where they graduated [19]. It is also noted that university graduates have considerable advantage in securing employment to prestigious workplace over those without a university degree. On the basis of this close linked between university background and employment opportunities Japanese students were really determined to strive in their study.

Besides, Japanese give prior consideration to education because they believe that learning and educational endeavor are means to their personal and societal improvement.

Teachers Intervention – The Association for Childhood Education International concludes that motivating students is a key element of effective teaching that is largely dependent on the teacher [7]. The teacher's ability to devise relevant and challenging activities, presenting it with enthusiasm and relating it to students' interest are all attributed to teacher's ingenuity to motivate learners.

Teachers who are enthusiastic and have a caring attitude toward students build up student's interest. Research shows that students are more likely to be interested, energetic, curious, and excited about learning when a teacher is enthusiastic [18]. Also, Wentzel [48] found that perceived caring from teachers was related significantly and positively to students' academic effort. Constant encouragement and support from teachers evoke positive feeling and learning enthusiasm. That is why Japanese teachers unceasingly taught and urged students to "gambare" which means "make effort!" or "persevere!" in every learning task.

Aside from encouraging students, teachers may employ various approaches/ strategies to cater students' individual differences. In teaching mathematics for example, grouping approaches like cooperative learning, within classroom grouping and individualized instruction can be utilized to increase students' motivation while considering their learning styles and needs [15]. Likewise, teachers' initiative to use concrete and manipulative instructional devices, designing activities which contain mathematics problems ranging from easy to difficult thereby allowing students to answer some questions correctly depending on their ability level and using game based strategy will bring about learners' motivation to learn mathematics [42]. Based from class observations, Japanese educators do apply these strategies in their mathematics lessons.

Moreover, Japanese teachers' broad responsibility still extends in instilling fundamental Japanese values and attitudes. Since the culture views the school as a moral community and a basic training ground for students to become better citizen, teachers guide students' way of life and teach them about discipline and their social role in Japanese society. These, in fact, are embodied in their moral education lesson. These responsibilities are equal in importance to the academic role of developing students' motivation and helping students meet the high academic achievement.

Ultimately, teachers' intervention is fully maximized by maintaining a close connection

with the students' parents. Teacher outreach efforts to parents most typically include writing a newsletter, doing home visits or having open class days where parents can observe their children in class. Actually, these types of home-school collaboration are highly practiced in Japan in order to inform parents of the progress of their children.

Parents Involvement - Parents involvement means supporting literacy, helping with homework and maintaining expectations, which in turn will result in the child's motivation to achieve, develop quality work habits and pro social behavior [22]. Another involvement is the physical presence of parents in the school which may range from occasional attendance at a parent-teacher conference or school event [49].

When working to increase student engagement and motivation, it is important to include parents and discuss ways how they can support children's learning both at school and at home. Providing a warm, accepting home environment and getting involved in students' homework are ways parents can support their children [39]. Help in home work is carried out by spending a specific time each day to look over and give suggestions to children's work.

In Japan, since parents are aware that success in school is a crucial determinant of their children's economic and social status in adult life, they provide whatever help they can. However, recently due to busy schedules between home and work, parents lack quality time to offer with their children especially in doing their homework tasks. Thus, they reinforced this concern by either hiring a private tutor or more commonly, sending the child to "juku" or cram schools to be provided by necessary reinforcement in order for the child to keep abreast of the demanding curriculum.

Some surveys provide basis of the positive relationship between parent involvement and high level of students' success. The survey of the national education ministry of Japan on its second year of academic study, consider the importance of home learning as a factor in increasing students' level of learning where parents guide students and evaluate their homework especially in Japanese language and arithmetic [29]. Huang and Waxman [14] in their study found that Asian-American, who on average did better in white students in math, had stronger parent support. This correlated with greater pride in their class work, a stronger desire to succeed, and higher expectations to do well. Furthermore, in a study conducted by Civic Enterprise called the Silent Epidemic, funded by the Bill and Melinda Gates foundation, researchers found that a lack of motivation is the number one reason why students drop out of high school. High school drop-outs give many reasons why they left school, but they have similar idea what could have helped them stay is parent involvement, 7 out of 10 said they needed more support from their parents. [31]

Peer Influence - Middle and high school students' level of engagement in school is highly influence by peers [39].

As younger student may be able to find the motivation and desire to learn from home and teacher, older students on the other hand are opt to seek out from classmates and friends whom they have similar interests and values. Pike and Eley [34] on their study state that by the time children enter adolescence their time spent with peers is more than double than they spend with their parents. On that particular stage therefore, teens are more vulnerable to peer pressure.

Peer pressure can range from positive influence such as academic and athletic achievement to negative influence such as drug and alcohol use [10]. Path analysis of data from a regional survey of 7^{th} – 9^{th} graders in eight Japanese schools consider deviant peer influence as one factor commonly linked with smoking and drinking among early

adolescents boy and girls in Japan [27]. Another survey revealed that among junior high school students, 76% reported having tried alcohol and 45% reported having tried tobacco [21]. Peer pressure does not stop with drug and alcohol alone but it also extends to bullying. The study of Espelage [9] found out that there is a potential tie between bullying and peer influence in U.S. middle schools. An education survey in Japan showed a total of 128,898 cases of bullying ranging from nasty e-mail messages to physical assault were confirmed at elementary through senior high school across Japan in fiscal 2006 [43].

Negative peer pressure has always been a factor in adolescence. However, the flip side is there is also a positive peer pressure. This happened to students when their peers encourage them to participate and excel in athletics music and various types of extra-curricular activities [10]. Here, peer influence is viewed as a way for adolescents to become better rounded, developing their talents and skills other than academics.

In Japan schools, club activities provide one of the primary opportunities for peer group socialization. Students joined sports or cultural clubs to develop individual personalities and nurture social and group interaction skills. Many Japanese students participate in these student-organized clubs, where they spend 2 to 3 hours per day after school and on weekends together with their peers. Japanese teachers and parents see club participation as academically motivational because it makes for a well-rounded school experience [50].

Generally, peer influence can depend largely on the type of friends and peer group with whom the adolescent get associated with. It was found that associating with friends who have a positive affect toward school, enhance students' own satisfaction with school, whereas, associating with friend who has a negative affect toward school decreased it [36].

ISSUES CONFRONTING THE JAPANESE EDUCATIONAL SYSTEM IN ITS EFFORT TO MOTIVATE STUDENTS

The Japan Study indicates that one explanation for the Japanese education system's success is their ability to actively build students' motivation to learn [49]. In fact, the current curriculum strongly upholds its objectives in motivating students, making motivation an integral part of the teaching and learning process. As emphasized by the Curriculum Council that to develop the *zest for living* -- it is not simply the ability to make a living…but the ability to make one's way through today's dramatically changing world -- it was vital for educators to:

> Teach subjects in a way that motivates students to study and learn;
> Enhance problem-solving and learning through experience and increase student's study choices to respect their individuality;
> Introduce teaching methods responsive to the needs of individual students.

However, despite the system's effort of promoting policies to motivate students, it is still inevitable to face new set of challenge which concerns on Japan schools' declining academic standards. The succeeding discussion describes the issue:

On the basis of various international tests, Japanese students have demonstrated that they are good at solving mathematical tasks that appear in school mathematics. One of the reasons that Japanese students have been performing at a high level in the past was attributed to a "good" national course of study [11]. The Courses of Study are provided as the standards for educational courses in Japanese schools. The notion of "good" means essentially that each topic in the national course of study is reviewed and critiqued by using

a rationale that addresses its educational and mathematical value. But the trend did not continue long after there are some revisions in the curriculum.

In school year 2002, The Ministry of Education, Culture, Sports, Science and Technology (MEXT) made a major curricular reform. According to MEXT, the purpose of the Courses of Study that was implemented from 2002 under the comprehensive five-day school week is to foster "zest for living" (ikiruchikara) in children, by making schools more flexible and responsive to individual student needs. The Courses of Study seek to foster the qualities and abilities necessary to acquire steadily the rudimentary basics of education, such as reading, writing and arithmetic, and to learn, think and act for oneself as well as to develop problem solving skills.

In an attempt to stimulate students to be independent and self-directed learners, one third of the content of the previous curriculum was eliminated [8]. The modification of the school timetable from six days a week to five days a week by using a Saturday-off system was the main reason for reducing the content [11]. The MEXT which has the responsibility for developing the national course of study tried to reduce the content to accommodate the reduced school schedule.

Also, under this educational reform, Japanese students in grades 3-9 are now required to take Integrated Study classes in which they and their teachers jointly plan projects, field trips, and other "hands-on" activities. This is the period when children can study beyond the regular framework of subjects by using each school's idea [4].

The succeeding tables show the standard number of school hours in a year in Japanese elementary schools which was implemented in year 1992 and year 2002. Table 2 shows the reduction of class hours. Reducing the annual total of class hours by 70 credit hours as compare to the data shown in Table 1.

Standard number of school hours in elementary schools – (implemented April, 1992)

	Grade					
Curriculum	1st	2nd	3rd	4th	5th	6th
Japanese Language	306	315	280	280	210	210
Soc. Studies, Life & Environmental Studies	102	105	105	105	105	105
Arithmetic	136	175	175	175	175	175
Science	--	–	105	105	105	105
Music, Arts & Handicrats, Homemaking	136	140	140	140	210	210
Physical Education	102	105	105	105	105	105
Moral Education	34	35	35	35	35	35
Special Activities	34	35	35	70	70	70
Total	850	910	980	1015	1015	1015

SOURCE: Jichi Sogo Center 1991.

Standard number of school hours in elementary schools – (implemented April, 2002)

Curriculum	Grade 1st	2nd	3rd	4th	5th	6th
Japanese Language	272	280	235	235	180	175
Soc. Studies	--	–	70	85	90	100
Arithmetic	114	155	150	150	150	150
Science	--	–	70	90	95	95
Lives	102	105	–	--	--	–
Music	68	70	60	60	50	50
Drawing and Handicrafts	68	70	60	60	50	50
Home Economics	--	–	–	--	60	55
Physical Education	90	90	90	90	90	90
Moral Education	34	35	35	35	35	35
Special Activities	34	35	35	35	35	35
The period of integrated study	--	–	105	105	110	110
Total	782	840	910	945	945	945

SOURCE: Diagram from Enforcement Regulation of School Law, 1998 from CRICED, 2006

Consequently, Fujiie [11] viewed that when the national course of study goes on too much of a “diet” students' academic performance could become undernourished.

Recently, argument arises that the current course of study is responsible for the lower scores registered by Japanese students in the Organization for Economic Cooperation and Development's (OECD) 2006 Program for International Student Assessment Survey, compared with their scores in the 2003 survey [44].

The OECD Program for International Student Assessment (PISA) covered about 400,000 15-year-olds in 57 countries and regions. Every three years it assesses students` abilities in three fields : reading comprehension, mathematical skills and scientific literacy. The OECD, arranges the tests so that the average score is 500 points. In the first PISA, carried out in 2000, Japan ranked 1st in mathematical skills and 2nd in scientific literacy, while ranking only 8th in reading comprehension -- a test that gauges students' ability to strive to find an answer. However, comparing the results in the 2003 and 2006 survey, Japan fell from rank 14th to 15th in reading comprehension, from 6th to 10th in mathematical skills and from 2nd to 6th in scientific literacy [45]. The corresponding scores obtained in three fields of study are shown in the figure below.

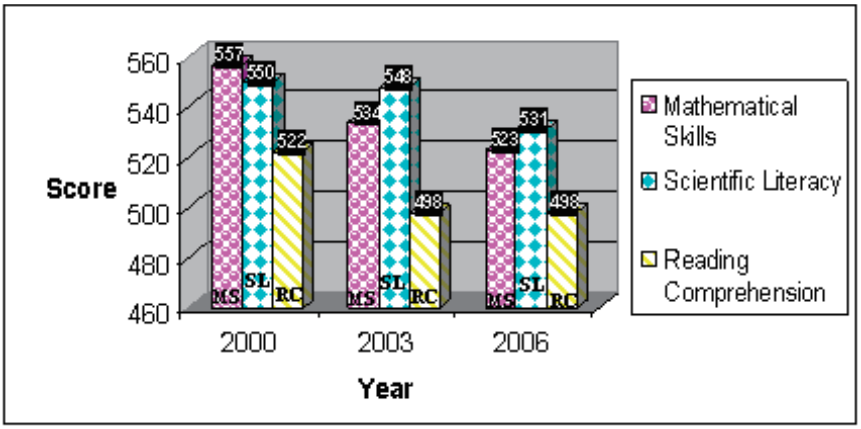


Figure 1. Scores of Japanese Students in PISA Survey

Finland and Korea, and the partners Chinese Taipei and Hong Kong-China, outperformed all other countries in PISA 2006. Japan was among other countries with mean performances significantly above the OECD average [32].

The result of the survey shows a dramatic decline of the scores of Japanese students, yet the educational ministry insists that Japan's scores as a whole are around or above the OECD average. But the PISA results cast doubt on Japanese children's ability to understand what was taught in school. This in turn, suggests the education ministry, educators and parents to take necessary measures and find solutions to this existing educational setback.

In response to this issue, The Central Education Council, an advisory body for the education minister, has proposed increasing class hours by about 10 percent for key subjects like Japanese, arithmetic, math, science, social studies and gym at elementary and middle schools. As for the integrated study, the council calls for fewer hours, from 430 hours at present to 280 hours [46]. Lately, the education ministry has unveiled drafts of revised courses of study for elementary and middle schools. The new courses of study will become effective in fiscal 2011 for elementary schools and in fiscal 2012 for middle schools [44]. The drafts call for increasing the number of class hours and teaching content.

Hence, in mathematics subject for example, topics like finding for the area of trapezoid and the congruence of figures are now included in the content of the elementary curriculum which was a part of the middle school curriculum before. While the topic on quadratic equation is now a part of the middle school curriculum which was taken from the content of the high school topic. The draft of the revised course of study reflects these changes [6].

Focusing on the drafts of the revised course of study, still there are various feedbacks and suggestions among the critics expressing their concerns on the current issue. As The Japan Times editor stressed that "the council and the education ministry should realize that the increased class hours do not guarantee higher scholastic ability". He further states that the ministry need to re-think Japan's teaching methods, materials and class sizes. OECD Secretary General Angel Gurria also emphasizes that education authority should consider how to further strengthen children's motivation to learn and think by themselves. What critics had stated are feedbacks and suggestions for improvement, encouraging the education ministry to take proper account of other factors that may pose significant contribution to the educational advancement. At present, no one can directly judge yet the credibility of the revised course of study. The outcome is far yet to be determined. However, it is strongly believed that Japan's aim of upholding the highest standard of education in the world will never wanes, as the education ministry continues to exert a great deal of effort in addressing appropriate measure to overcome this existing curricular issue. Through Japanese people admirable work attitude and discipline and with their high regard for education, such effort will never be in vain.

In fact, Japanese teachers engage in a relentless, continuous process of improving their lessons to improve students' opportunities to achieve the learning goals. This is manifested by having class visit by teachers, as part of the class and curriculum evaluations, where teachers observe a class and after which they hold seminar to discuss the objectives, content and methods of the lesson. By learning from these seminars, teachers reassess their classroom instruction methods through mutual feedback to improve individual quality and abilities.

This continuous activity of improving teaching instruction and the national courses of study in order to come up with a quality curriculum standard with the specific aim of enhancing the interest of students to learn to help raise the level of children's academic

ability are all included in Japan’s dynamic curriculum development.

MOTIVATION AND ACADEMIC ACHIEVEMENT: RELATED STUDIES

This study further extends its scope by determining if there is really a close correlation between motivation and academic achievement. As one author noted, “Student's motivation for learning is generally regarded as one of the most critical determinants, if not the premier determinant, of the success and quality of any learning outcome” [30]. To further prove that claim, the following studies reveal these results:

The result of the study of Tella [42] on “The Impact of Motivation on Student's Academic Achievement and Learning Outcomes in Mathematics among Secondary School Students in Nigeria” shows that secondary school students differ significantly in their academic achievement based on the extent to which they are motivated. The results reveal that highly motivated students perform better academically than the lowly motivated students. Kuntz [23] study result shows evidence for a correlation between motivation and academic engagement in the high school population, lends a good support to the previous findings.

The study on the Relationship between Classroom Motivation and Academic Achievement in Elementary-School-Aged conducted by Brouussard & Garrison [3], revealed findings consistent with previous researches that higher level of motivation were found to be related to higher math and reading grades in third graders from a mid-sized city in the southern United States. Also, high motivation and engagement in learning have consistently been linked to reduced dropout rates and increased levels of student success [24].

Moreover, on Bailey's [2] study, she wants to determine whether multiple intelligences, effort or motivation could be used to predict academic achievement in a College Prep Biology class at Highland High School. Gardner's multiple intelligences, the School Achievement Motivation Rating Scale (SAMRS) and various classroom measures were used to collect data. The relationships between intelligence scores, SAMRS scores, assignment completion rates, and class and test grades were analyzed using correlation statistics and regression analyses. The results indicate that motivation is the strongest predictor of academic achievement.

Lastly, Chuansheng & Stevenson [5] examined the motivation and mathematics achievement of Asian-American, Caucasian American, and East Asian students. Students were given a curriculum-based mathematics test and questionnaire. Mathematics scores of the Asian-American students were higher than those of Caucasian-American students but lower than those of Chinese and Japanese students. Factors associated with the achievement of Asian-American and East Asian students included having parents and peers who hold high standard, believing that the road to success is through effort, having positive attitudes about achievement, studying diligently, and facing less interference with their school work from jobs and informal peer interactions.

Based from foregoing study results, it is confirmed that motivation is indeed, essential for teaching and learning.

CONCLUSION:

There are several motivational techniques determined in this study which were based from observations of the teaching-learning practices in Japanese schools. Utilizing these techniques will assist educators -- Filipino educators in particular, in enhancing students'

interest in learning mathematics or other subjects. However, there are some limitations to consider:

①The applicability of these motivational techniques will depend in particular situation. Although these techniques proved its worth in enhancing students' learning interest in Japan, yet there's no guarantee that same will work in some other countries. Differences in culture, educational structures and practices and learners' individual personalities are some factors considered that can limit its applicability. Teachers have to decide which techniques to utilize.

②Aside from motivational techniques, educators should as well take into account the importance of other motivating factors like parental involvement, teacher support, peer influence and learners' desire to succeed when enhancing students to learn.

③The motivational techniques that had been listed in this study are just only a handful of techniques of the Japanese school system; still, there are lots to uncover, considering the fact that a motivational techniques a teacher employs varies depending on the type of learner they are attending to.

Japan, worldly known for its high status in education, had increasingly become the reference of other countries to appraise their educational system. However, Japanese Educational System is not also perfect in itself; it is also facing problems of declining academic standards. But despite of those issues, the system still functions well and continuously making necessary measures for improvement. The Japanese Educational System still serves as an educational model for other countries.

In Philippines specifically, the necessity of motivating students to learn is deemed important, especially nowadays when the country's educational system is facing problems of inadequate learning facilities and instructional materials, lack of classrooms and other budgetary constraints which eventually lead to the deterioration of the quality of education. While the system is taking appropriate measures of overcoming these problems, it is also necessary for educators to further strengthen students' motivation to learn.

Since the preceding discussions provide a compelling idea that through enhancing students' learning interest really paved the way to academic success, educators should therefore adhere to its importance.

Indeed, the motivational techniques identified in this study will surely serve as an essential guide for Filipino educators in facilitating students' learning interest.

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