

## UNDERSTANDING OF AND ATTITUDE TOWARD PEOPLE WITH DISABILITIES IN AN ENGINEERING AND TECHNOLOGICAL COLLEGE IN THE PHILIPPINES WITH INCLUSIVE EDUCATION PROGRAM MODEL

**Karen D. Sacdalan**

Mapúa Institute of Technology,  
PHILIPPINES.

### ABSTRACT

*Inclusive education is a relatively new educational approach being implemented as one of the many arrays of services of special education in the Philippines. There are only a few tertiary educational institutions existing in the country that accommodate students with special educational needs. This study primarily investigated the possibilities to which inclusive education can thrive in one of the leading engineering schools in the Philippines, Mapúa Institute of Technology (MIT), which offers a learner-centered approach among technical and engineering students. Findings indicate positive understanding and attitudes among 100 students and 20 teachers toward people with disabilities in engineering and technically oriented environment. The MIT administration evaluation report further revealed that while there are enormous challenges related to improving the physical attributes of the school as well as allocating the necessary budget, as far as the delivery model is concerned, emerging collaboration and strong support are in place which can be regarded as positive indicators for inclusive education to succeed.*

*Keywords: Educational approach, Special Education, Philippines*

### INTRODUCTION

Studying in an engineering or technological school means you have the genuine interest to pursue your dreams and aspiration to become an engineer (e.g., mechanical, chemical, or civil), an IT expert, a pilot, or scientist in a more specialized field of science and technology. This research is then conceptualized to explore the many possibilities that, in today's developing technologies, there also exist some unique special abilities that would match certain skills (i.e., numeric and quantitative) possessed by people with disabilities. In this research, 'disabilities' will be defined using the Philippine Magna Carta for Persons with Disabilities, which has a three-part definition of *disability*.

Under the implementing rules and regulations of the Philippine law, an individual with a disability is a person who (1) has a physical or mental impairment that substantially limits one or more psychological, physiological or anatomical function of an individual or activities of such individual; (2) has a record of such an impairment; or (3) is regarded as having such an impairment. In view of this, the researcher proposes to focus greater attention on 'students with educational needs' (SEN), the said students having been kept from thoroughly exploring their special abilities because they were not given the chance to pursue them in the tertiary level of education in their own homeland. The UK government defines SEN as children who have needs or disabilities that affect their ability to learn. This study will thus mainly explore the possibilities of creating academic opportunities for these students with educational needs by finding out the level of understanding and attitudinal readiness in the only ABET-accredited engineering institution in East Asia, Mapúa Institute of Technology (MIT).

MIT was founded in January 1925 by Don Tomas Mapúa, the country's first registered architect as a non-sectarian institute for higher learning pioneering in technical education. MIT's vision is to become a global center of excellence in education by providing instructions that are current in content and state-of-the-art in delivery; by engaging in cutting-edge, high-impact research; and by aggressively taking on present-day global concerns. Likewise, MIT's mission is to disseminate, generate, preserve, and apply knowledge in various fields of study. MIT also aims to use the most effective and efficient means of providing its students with highly relevant professional and advanced education in preparation for and furtherance of global practice.

At present, MIT prides itself in having its engineering and IT programs accredited by the Accreditation Board for Engineering and Technology. ABET is the recognized accreditor for college and university programs in applied science, computing, engineering and technology in the US. ABET accreditation is an assurance that a college or university program meets the international standards. Today, MIT is the largest engineering school in the Philippines, with nearly 15,000 students across its various program offerings. In the year 2010, MIT started to accommodate the increasing number of requests from parents to admit their children with special conditions, who they believed to be capable of meeting the academic standards of the Institute. According to the Center for Guidance and Counseling (CGC), these children were able to satisfactorily pass the entrance exam as an entry requirement of the Institute. It was on this stance that MIT responded by coming out with a Standard Practice Guide (SPG) as an implementing policy and guide in accommodating student with special needs.

According to Donaldson (1980), structured contact with people with disabilities resulted in a more positive attitude on the part of individuals without disabilities. His research further indicated that contact with person with disabilities, structured or not, can facilitate the development of positive attitudes towards these individuals. In studies among preschool children, it was discovered that preschool children's attitudes toward children with disabilities were related to the frequency of actual contact with classmates with disabilities – the more frequent the contact, the more positive the attitudes (Okagaki et al., 1998). Learning empathy, or demonstrating the ability to help others, is not learned in books or intellectual exercise, but rather through the actual experience of interacting with people disabilities and cultivating a sense of compassion, empathic understanding, and reciprocity. It is on this same premise of exposing normal students through the inclusive education program model that this study suggested, thereby making such model become an integral part of the MIT's existing general education.

Since one of the competencies of MIT is excellence in the field of engineering and technology, it is imperative to design skills and classifications of disabilities that will be manageable within the reasonable resources of the administration while staying true to the inclusionary approach. An environment that is inclusive-program sensitive should adapt and enhance the student's independence and facilitate ongoing support with his or her classmate as SEN. The adaptations do not need to be complex and may be as simple as having a student tactilely and visually cue his classmate to check his schedule of activities (Downing, 2008).

Children with special conditions tend to have difficulty encoding information into their memory system, and therefore lack the basic skills and cognitions that must be in place before they can attempt higher-order thinking. Students with learning problems further require repetition in instruction, spaced practice, and frequent review (Gore, 2010). Therefore, in order for SENs catch up in the learning process experience in an engineering

school, learning strategies must display these inclusionary approaches that make use of explicitness, repetition, and structure as master keys to effective instructions as learning methods. The focus of this study was to highlight strategic intervention by promoting peer-support and cooperative learning via channels of inclusive programs. Similarly, there were findings that suggested new intervention modalities towards children with disabilities to cultivate their social and functional competence (Dyson, 2005).

A study of 108 individuals composed of students, SPED teachers, consumers, and allied professionals revealed that school-related factors for teachers were comprised of their perception of and attitude towards SENs and their program opportunities to communicate with parents (Bautista, 2009). Perception and attitude are key features before a person undertakes any act. Given such a premise, these key features are crucial determinants in implementing inclusive education programs for the admission of college students in MIT. The goal to equalize opportunities for other people (who are less capable) to learn and grow may also depend on the kind of environment he is into. There should be more opportunities for students to interact with their classmates, teachers, and other individuals in school. Engagement in numerous physical activities should enable students to experience their environment and body in a new social, physical, and mental context (Delos Reyes, 2007).

In strategically designing an intervention through the inclusionary approach, the study will utilize peer-support, which had many positive benefits from previous research studies. Positive attitudes for example, were based on two sources: (a) the social (e.g. being nice) and functional (e.g. can play) competence of people with disabilities, and (b) the children's own desire to be pro-social and emphatic, and to practice reciprocity with their peers with disabilities. Previous studies have revealed the presence of abstract and psychological attributes (rather than perceptual cues alone) as criteria for determining children's attitudes towards disabilities (Dyson, 2005). Consequently, the inclusive education approach will essentially focus on the positive regard about identification and assessment. Often, it is easier to change the learning environment than to have the students' needs conform to the environment they are into. The behavioral functioning of students with disabilities and special abilities impacts on the learning function (Grover, 2009). As such, the whole school system in MIT must be prepared and flexible to share responsibilities on how to respond appropriately to the needs of these SENs.

## PROBLEM ANALYSIS AND PROJECT PLANNING

Despite attempts by MIT to accommodate students with special needs using the SPG, it was still a troublesome experience for MIT administrators to manage and support the program. This study is an attempt to come up with new strategies on undertaking an intervention research model in order to find new and effective ways of accommodating and managing the educational needs of MIT students with special educational needs. In 2010, MIT admitted some students with the following conditions: a) Cerebral Palsy, b) Autism (Asperger syndrome), and c) Attention Deficit and Hyperactivity Disorder (ADHD). Consequently, these SENs encountered many difficulties in meeting academic requirements that eventually led them to decide to be transferred from another school. Given this, the guidance office was in constant coordination with the parents of the SENs who were also in regular contact with the students' respective psychologists and psychiatrists. These allowed the SENs to receive due assistance from the Guidance office that somehow helped them cope better with the academic demands.

On the other hand, the teaching workforce's ability to handle and manage these SENs appeared to be one of the chief problems confronting the SPG program implementation. In

the preliminary stage of implementing the SPG, faculty members were not fully prepared to take on such undertakings. With the already rigid academic requirements, it was also behaviorally difficult for teachers to handle the classroom management aspect. In this view, this research then primarily responded to the following problem questions:

1. What is the understanding and attitude of MIT students towards people with disabilities?
2. What is the understanding and attitude of MIT faculty members towards people with disabilities?
3. How open and accepting are the students and teachers to people with disabilities in view of the inclusion approach?
4. How well can an inclusive education program work as the best placement option for SENs in MIT?

This study explored the vast features of the following items as a vital source of information to determine the possible interventions:

1. Physical facilities, tools, and setting
2. SPG and other educational programs in providing support for students with disabilities – its existing policies and how can it be improved
3. MIT top management and administration support – views and perspectives

This study generated sample responses through a survey that were participated in by 100 students and 15 faculty members. It elicited data and information on the kind of understanding and attitude borne by the respondents towards people with disabilities.

A survey instrument was used and validated by academic experts in MIT. The survey tool was composed of 30 statements that conveyed various positive and negative impressions toward people with disabilities. The survey instrument made use of a 5-point Likert scale that measured increasing level of agreement plus an additional 10-item measure that elicited ‘yes’ and ‘no’ responses. In order to substantiate the quality of answers, a short essay portion was provided which captured freehand responses. A statistical treatment of mean percentage was used which counted agreement and disagreement of the respondents from each claim or statement in the survey. The items were factor analyzed such that positive and negative understanding and attitude of the respondents was measured and evaluated accordingly.

## Design

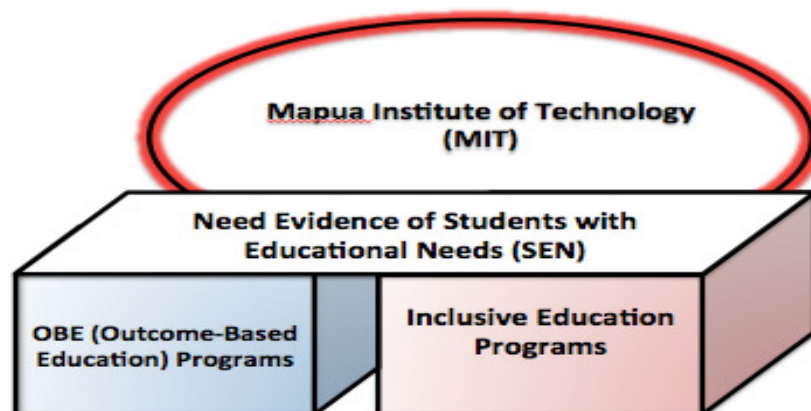


Figure 1. Model for Inclusive Education Program of MIT for SENs

MIT may utilize the intervention design and structure of inclusive education with a solid foundation grounded in the OBE concept, an approach that focuses on learner-centered and outcome-based education efforts. Surrounding this concept, MIT can create programs that will embark on a responsive approach to attend to the needs of the learners. The inclusionary approach stresses on child-centered pedagogy using peer tutoring, co-operative learning and group learning. Irrespective of the nature and degree of disability, MIT can be more capable not only on educational grounds but also in the social and moral grounds of the learners. The new OBE approach implemented by MIT allows early assessment in order to detect students who are manifesting maladaptive behaviors in the classroom.

Using inclusive education as a proposed intervention will pave the way to a prevalent model for offering education within the context of equality in diversity. The varying disabilities that may be present are equally attended to without discrimination, thus enabling the learning environment to be fully responsive to the learners' need. In the present set up, this study proposed below a more detailed process following the sequential segments of inclusionary interventions.

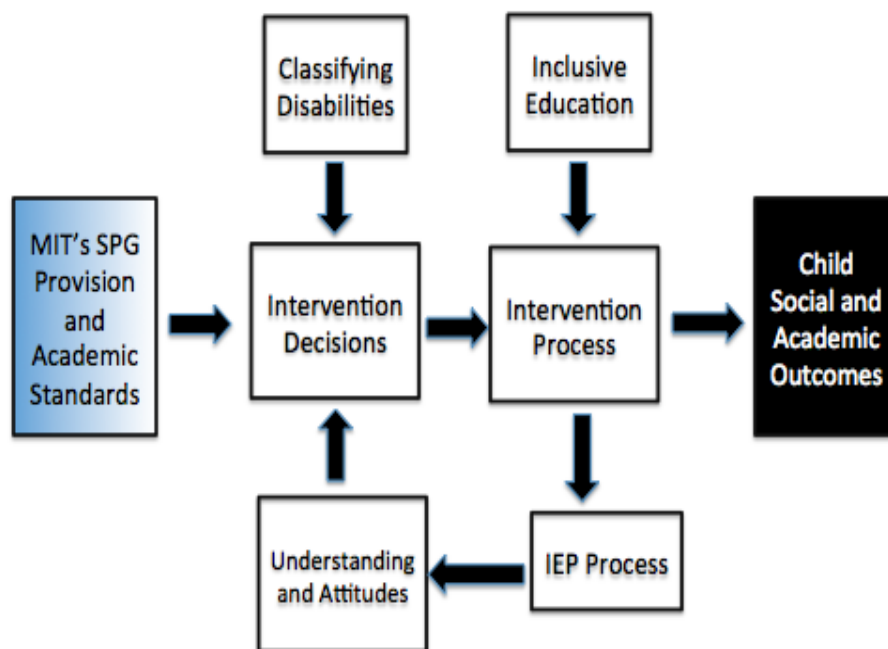


Figure 2. Intervention Process of Inclusive Education Program of MIT for SENs

This study followed an intervention research model, which made use of a step-by-step approach of introducing new strategies in the process. Since MIT's SPG did not contain factors in managing students with disabilities, the development of interventions now becomes a critical juncture to achieve successful academic outcomes based on data, expert review, and practical experience.

In the first phase, the process suggests defining what disabilities are manageable for the MIT administration and which ones are too difficult to manage (e.g. high functioning autism). The second phase knows the level of understanding and the kind of attitude of both the student and teaching workforce. Essentially, the desirable outcome should head towards positive regard and acceptance of persons with disabilities. The third phase prepares the MIT administration to plan and implement interventions through the change processes of inclusive education. The mediating process of an IEP (Individualized Education Plan) is an important



factor because it attempts to customize and individualize the current curriculum and instructions of SENs. This phase may pare down in introducing intervention (e.g. peer-support and cooperative learning) and narrow the focus to those processes of learning, thereby leading towards the desirable outcome of producing students with successful academic outputs.

Moreover, the intervention process of Figure 2 suggests a cyclical pattern if the undergoing intervention process of inclusion approach does not reach its desirable outcome. The intervention process must determine the system level of change (Frazer et.al. 2009) from all its stakeholders (community, organization, family, group, and individual). The method of delivery of these interventions can be via a lecture, research, collaboration, hands on activities, meetings, forums, trainings, and other advocacy programs.

**FINDINGS**

Below are the findings that revealed the understanding and attitude of students towards people with disabilities:

**Table 1. MIT Students’ Positive Understanding and Attitude of Students toward PWDs**

<i>No.</i>	<i>Statement</i>	<i>%</i>	<i>Descriptive Equivalent</i>
6	I believe people with disabilities have dreams too which they can pursue if only opportunities are provided for them.	76%	Strongly Agree
7	I am most likely to offer help to a classmate with disabilities if he or she is having a hard time to learn.	45%	Strongly Agree
8	I believe that education should be made available to all regardless if they are normal or with disabilities.	79%	Strongly Agree
10	I think people with disabilities also deserve the right to be educated and become productive citizens of our country.	76%	Strongly Agree

Data revealed that students’ understanding and attitude towards people with special needs yielded a more positive regard which conveyed that ‘education for all’ is a main thrust. They viewed education as not just a privilege but more so, as a human right. The students’ way of looking at people with disabilities is generally favorable, connoting equal opportunity rights at 79 percent as the highest agreement. Generally, students have a favorable attitude towards people with disabilities, and as far as understanding is concerned, they equally viewed these individuals with potentials and with a promising future ahead.

**Table 2. MIT Students’ Negative Understanding and Attitude of Students toward PWDs**

<i>No.</i>	<i>Statement</i>	<i>%</i>	<i>Descriptive Equivalent</i>
16	I believe that people with disabilities do not have a good future because they cannot go to school.	10%	Strongly Agree
21	People with disabilities have many limitations and so it will very hard for them to learn and grow.	3%	Strongly Agree
25	Personally, I think I will struggle working or learning along with a person with disabilities.	4%	Strongly Agree
30	I do not have a clear understanding about how hard it can be for people with disabilities to learn and get access to education.	10%	Strongly Agree

Data revealed a very low percentage of strong agreement to the negative statements. This meant students either do not have difficulty in understanding the welfare of PWDs or have a very high regard toward them. The MIT student's perception towards PWD appeared to be favorable such that they believe they should be given equal access to education for a better future. Based on the qualitative responses of these students, they generally support and adhere to the right of these PWDs to learn and grow as individuals. Thus, MIT should open its doors to them, which will also add value to the image and good branding to the school. However, one of the major setbacks consistent among students' responses was the physical limitation of the school facilities. Substantially, responses are in favor of accommodating PWD's in the campus and offering them equal access to education, believing that they too have innate potential that will help them achieve their goals if only the right opportunities are provided for.

**Table 3: MIT Students' Belief System toward PWDs**

No.	Statement	%	Descriptive Equivalent
1	People with disabilities have the right to learn and grow.	99%	Yes
6	College is not a place for people with disabilities.	5%	Yes
7	Our government has a poor implementation system in helping people with disabilities.	70%	Yes
8	The schools have limited capacity to help people with disabilities.	68%	Yes

Data showed a very high percentage of responses in view of the rights of PWDs to learn and grow as individuals, which was pegged at 99 percent. This means more students have a strong belief system that people who have disabilities should equally be treated and have the right to live comfortably in an environment that will not discriminate them. There is also a common belief however that while the current government does not have a consistent implementing system, neither do schools exercise their capacity to help PWDs. Both of these serve as barriers in enabling PWDs achieve their goals.

**Table 4. MIT Faculty's Positive Understanding and Attitude of Students toward PWDs**

No.	Statement	%	Descriptive Equivalent
7	I am most likely to offer help to a student with disabilities if he or she is having a hard time to learn.	55%	Strongly Agree
8	I believe that education should be made available to all regardless if they are normal or with disabilities.	80%	Strongly Agree
13	I think people with disabilities can perform certain task that is even above par than their normal counterparts.	60%	Strongly Agree
15	I feel it is just right to support the learning needs of people with disabilities so that the can be productive citizens as well.	75%	Strongly Agree

Faculty members' responses showed a high percentage at 80% with the belief that education should be made available to all regardless of one's make up. This data reflects encouraging results such that there is a positive regard towards people with disabilities. Thus, teachers consider each student as a unique individual with distinctive potentials, familiarities, abilities, points of view, and guidance needs. This in turn, assures that in view of the interventions of inclusive education, the teaching workforce possesses a sound understanding and attitude,

grounded in their openness and acceptance of SENs being part of the classroom and campus communities.

**Table 5. MIT Faculty Belief System toward PWDs**

No.	Statement	%	Descriptive Equivalent
1	People with disabilities have the right to learn and grow.	100%	Yes
6	Our school is not ready and equipped to accommodate students with special condition.	70%	Yes
7	Our government has a poor implementation system in helping people with disabilities.	80%	Yes
8	The schools have limited capacity to help people with disabilities.	75%	Yes

As far as understanding and attitude are concerned; teachers are in strong agreement to support the rights of PWDs. Likewise, this has been the emphasis of the responses of teachers' views towards their understanding and support toward PWD, that they too deserved the right to grow and become productive citizens. The responses all connoted good intentions and goals that support the possibilities of admitting SENs in MIT.

### Evaluation

Based on the outcomes of the study, students and teachers of MIT yielded a positive understanding and attitude towards people with disabilities. Furthermore, both students and teachers view education as something that must be made available for all. As such, it must be governed by the concept that education is indeed a 'right' and not some form of one's idealism or patriotic view. Both groups of respondents are in strong agreement that PWDs also deserve a bright future and that their innate potentials should be honed and discovered, thereby placing the school as a training ground to make such possibilities happen.

To a large extent, evidence showed that some of the responses projected a degree of hesitation, and these were accounted to various reasons such as the current physical settings of the school (i.e. no ramps for wheelchair, elevators, limited space, etc.), lack of technical skills among teachers on how to individualize curriculum and instructions, and the need for awareness campaigns on different kinds of disabilities, not just on the physical aspect but also on the cognitive and behavioral aspects. Considering the current practice done by MIT administration, there is a lot to improve on the assessment and feedback systems of MIT in the admission process of students. In the current practice in MIT, the Center for Guidance and Counseling takes on the primary role of assessing students and giving referrals to professional health experts upon admission to the school. However, based on the feedback gathered from the said center, they still suspect that there may be some unreported cases.

Taken as a whole, the main idea of students and faculty members of PWDs revolved more on the physical attributes of the school, but not on the other behavioral and cognitive issues that goes along in co-learning and interacting with PWDs. These students are categorically classified to be equally manifesting developmental delays and communication disorders, and other psycho-social maladaptive behaviors. The findings also showed that while students understand the right for education and have a positive regard toward PWDs, the percentage of actually helping and being the 'doer' of assistance in the classroom only pegged an average score. Almost half the respondents may not have the inclination to actually offer help to their classmates with disabilities, but rather just have a preconceived desire of "wanting" to help.



Nonetheless, the findings showed encouraging results on the affective side, such that there is a positive regard towards people with disabilities. Both students and teachers consider each student with disability as a unique individual with distinct potentials, familiarities, abilities, points of view, and guidance needs. By and large, this assures that with the intervention of inclusive education, MIT students and teachers views are directed to support each student's needs and treat them as unique individuals with equal opportunity rights.

From a closer perspective of the issue of understanding and attitude, this study discovered that the Outcomes Based Education (OBE) concept of MIT as their current educational direction to some extent compliments the inclusionary approach. OBE is an approach that clearly focuses and organizes an educational system on what is essential for all students to be successful at the end of their learning experiences. MIT's OBE program is essentially made up of the following factors: Program Constituents/Stakeholders; Program Educational Objectives; Student Outcomes; Assessment of PEO (Program Educational Objectives) and SO (Student Outcome); Evaluation of assessment results, and Continuous Quality Improvement (CQI). Each component carries strategic goals that are aligned to the mission statement of the school. Particularly, the SO component represents the end-goal of the driving SO objectives, which are aimed to articulate the skills, knowledge, and behaviors of students, as well as the basis of curriculum design and development.

Essentially, OBE starts with a clear picture of what is important for students to experience, such as organizing the curriculum, instruction, and making assessments that ensures 'learning' ultimately happens. Thus, the OBE approach treads similar ground with inclusive education by focusing on learner-centered strategies and enabling the inclusive classroom teacher to consider the uniqueness of the student and a special being. There is an abundance of literature that focuses on the fact that inclusion for students with severe disabilities requires a great deal of effort to accommodate and adapt content of the general curriculum, modify instructions, and use assistive technology (Janney & Snell, 2006). An engineering school like MIT that prides itself to be technologically inclined while aiming for global competitiveness will be more capable to explore these promising possibilities for students with educational needs. This may also effectively cater to the diversity of students in the inclusive classroom. The teachers can also use the available local resources in their teaching of the inclusive classrooms as a reflection of resourcefulness to achieve the desired results (Steenkamp & Steenkamp, 1992).

Overall findings showed potential grounds for an inclusive education to thrive. Substantial data of positive understanding and attitudes of students and teachers toward people with disabilities are sufficient grounds for MIT to start designing and organizing intervention measures that can offer programs with SENs in the long run. As far as top management is concerned, such a program remained undiscovered because of very little feedback and occurrences of special educational needs. Nonetheless, school leaders and key organizers are willing to put considerable support behind exploring this educational program much further.

## RECOMMENDATION

This study examined the kind of understanding and attitude of stakeholders of MIT towards people with disabilities. In the process, the current OBE program of MIT was realized as a promising ground for inclusive education to prosper. Therefore, this study paved the way to identify a number of opportunities to improve the existing policies, implementing system, as well as the experiential learning of the people behind the school administration through the following recommendations:

1. **Create more specific guidelines and steps in identifying and classifying disabilities** – this can be part of the modifications for MIT's current policies in the SPG. This can be achieved by improving the process of assessment, which is currently being done by the Center for Guidance and Counseling. Assessment is done to determine how best to intervene to support a student in the learning process. Too often, assessment procedures in the educational system target student impairments. As Downing (2008) stated, the focus tends to accentuate what the student cannot do, rather what he or she can do. There is also a need for MIT to systematize and strengthen the database and data collection system for a more efficient and reliable record of information on students' profiles and backgrounds (e.g. checklist of symptoms on learning disabilities for parents to fill out upon admission to school). MIT may need to implement more strategic steps of assessing students upon entry to school with a focus on automation and technological approaches to gather and collect the necessary data.
2. **Curriculum content must be flexible and continuously customized based on the learners' capacity and skills.** Inclusive education calls for a shift from the traditional way of simply teaching all children the same content, to teaching every child as different individuals with different styles and needs (Johnsen, 2001). In essence, the curriculum of a student with a disability must be relevant to his/her needs (Brunswick, 1994). Thus, it is imperative that teamwork and collaboration be emphasized and supported administratively. The teachers may need to be highly familiarized with the kind of disabilities in order to be more adept in adjusting to the needs of the students. By doing so, teachers can better appropriately articulate the content standards and academic requirements suitable for SENs based on their level of functioning. Careful planning would also need to be in place to ensure that the instructions are more explicit for student's learning characteristics.

There is also the need to have a differentiated instruction in the program for SENs. As such, it recognizes the unique learning styles and needs of every students, whether with disabilities or not. General educators do not face homogeneous classrooms where all students learn in the same manner and at the same pace. In light of the outcome-based programs of MIT as a general direction, modifying select instructions will be relatively easier and not be considered as unrealistic goals.

3. **There is a need to strengthen the advocacy campaign to increase awareness of various disabilities and other developmental delays.** This can be organized by the Center for Guidance and Counseling by collaborating with other interest groups like the ADHD Society or Autism Society, along with teachers in order to better equip themselves (as well as the students) to be more knowledgeable with the learning styles manifested by MIT learners. Cooperative learning can also succeed on this approach such that it will promote social learning among students irrespective of their condition, regardless of whether they are normal or with disabilities, since the findings warrant strong positive regard of understanding and attitude towards student with disabilities.

The OBE program of MIT stressed that the program enables teachers to move forward into achieving satisfying outcomes and allowing teachers to measure how the learning goals were obtained. Through the outcome-based program, there is a constant cycle of learning from the experience which in turn permits more room for improvement. Needless to say, there is a clear cycle of continuous quality

improvement in the educational system of MIT. This kind of environment will make it even more suitable to accommodate students with disabilities.

4. **Scale up the knowledge, skills, and competencies of teachers and school personnel.** MIT must prepare and organize training and learning sessions to strengthen awareness and know-how on the scientific and practical points of inclusive education, not just on the surface level but in a more intensified way. This may entail the study of the unique characteristics of the learners to be able to match it against what learning method works best for SENs.

The challenge for teachers in inclusion is to individualize instruction by having students with disabilities participate in lessons in an appropriate (same-age) level and discern what objectives would be relevant for that student. Teachers also need to add a functional component by identifying what IEP (Individualize Educational Plan) could be practiced within each lesson and how learning opportunities to practice those objectives could be presented (Downing, 2008). The shift from the usual teacher-driven approach to a learner-centric outcome based education is not dramatic and may turn out to be quite a doable action for the teaching workforce. It is important to note though that this training effort will also entail cost, hence this study highly recommends that top management (with recommendations of the deans) allot sufficient budget in the next cycle of the academic year.

In the meantime, a simple lecture-forum can be arranged in a general or departmental meeting with topics on how to develop the IEPs. This can help add up to the knowledge and practicality of handling or managing students who may be candidates, or have been officially diagnosed to have any of the cognitive and behavioral disorders. Since inclusive education carries with it the IEP goals and benchmarks derived from the results of the assessment process, teachers may need to know the targeted skills that will link to age-level performance standards expected of all students. Teachers may also need to realize that para-educators (i.e. OT, speech therapists) are also crucial team members who will frequently be involved in implementing instructions or overseeing various activities. Therefore, teachers may need to open themselves to more collaborative efforts not just with the Center for Guidance and Counseling or with school authorities but more so, with numerous disciplines in the field as their “team members.”

5. **Improve on the feedback and communication system of students who may be manifesting symptoms of disabilities.** It will be a worthwhile undertaking to map out the profile of students passing the entrance requirement of the school and then determine the next appropriate learning intervention. It is also important that incident reports are not taken for granted and that reasonable steps are undertaken when feedback has been raised. Analyzing several activities and documenting the student’s performance in these activities will help determine areas in which adaptations in materials and instruction will be necessary.

## REFERENCES

- Bautista, Maria Yolanda Michelle. (2009). Factors related to work transition for person with special needs. University of the Philippines, SPED Department.
- Downing, J. E. (2008). *Including Students with Severe and Multiple Disabilities in Typical Classrooms*. 3<sup>rd</sup> edition, Paul H. Brookers Publishing, Co., Inc., p. 49, 53.
- Delos Reyes, I. B. (2007). *Factors related to the social competence of adolescent students with orthopedic impairments*. University of the Philippines, SPED Department.
- Dyson, L. L. (2005). Kindergarten Children's Understanding of and Attitudes Toward People With Disabilities. University of Victoria, *ProQuest Central*, 25(2), 95-105.
- Fraser, M. W., Richman, J. M., Galinsky, M. J. & Day, Steven H. (2009). Intervention Research, Oxford University Press, 3-4, 25-44.
- Gore, M.C. (2010). *Inclusion Strategies for Secondary Classrooms: Keys for Struggling Learners*. (2nd ed.) Corwin A SAGE Company, p. 23-25.
- Grover, S. (2007). Teaching Children with Special Needs. SBS Publishers & Distributors Pvt. Ltd., New Delhi, p.214.
- Janney, R., & Snell, M. E. (2006). *Social relationships and peer support* (2nd ed.). Baltimore, Md.: Paul H. Brookes Publisher.
- Johnsen, B.H. (2001). Curricula for the Plurality of Individual Learning Needs: Some Thoughts Concerning Practical Innovation Towards an Inclusive Class and School. In B.H. Johnsen and M.D. Skjørten (Eds.), *Education Special Needs Education: An Introduction*. Oslo: Unipub Forlag.
- Okagaki, L., Diamond, K.E. & Kontos, S.J. (1998). Correlates of young children's interactions with people with disabilities. *Early Childhood Research Quarterly*, 13, 67-86
- Osborne, Allan Jr. G. (2009). *Discipline in Special Education*. Corwin A SAGE Company, California, p. 69, 135.
- Steenkamp, E. & Steenkamp, W. (1992). *The Intellectually Handicapped Child: A Manual for Parents, Teachers and Related Professions*. Durban: Butterworths.
- Winzer, M. A. (2009). *From Integration to Inclusion: A history of special education in the 20<sup>th</sup> century*. Gallaudet University Press, Washington DC, 201-206.
- Official site of Mapua Institute of Technology <http://www.mapua.edu.ph>