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Master's Thesis of Public Administration

**Factors Affecting Implementation of
Inclusive Education in the Philippines**

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Abstract

Factors Affecting Implementation of Inclusive Education in the Philippines

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The international movement towards inclusive education has been challenging education systems to ensure access to quality education by creating an environment that is responsive to the needs of a diverse group of children. This study aimed to identify the factors affecting the implementation of inclusive education (IE) in the Philippines, particularly the inclusion of children with special needs. Five factors were posited to influence implementation: policy, resources, beliefs and attitudes of implementing agencies, community support, and implementation structure.

A descriptive survey was conducted among principals and teachers of public elementary schools with special education centers at the National Capital Region (NCR). Participants in the study generally had positive responses in relation to the implementation of IE, but noted that there are areas for improvement in terms of knowledge and skills, facilities, and learning materials, ancillary services, and parental engagement. Multiple regression analysis revealed that placement of CSNs in general education classrooms may

be influenced by other factors, while increasing levels of inclusion is associated with beliefs and attitude, and community support.

Keywords: policy implementation, inclusive education

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CHAPTER 1: INTRODUCTION

1.1 Background of the Study

The right to education of children has been asserted in various international conventions such as the Jomtien Declaration, Salamanca Statement, the Convention on the Rights of Person with Disabilities (CRPD), Dakar Framework, the Millennium Development Goals, and more recently the Sustainable Development Goals (SDGs) and Incheon Declaration. The CRPD is considered as the first internationally binding legal instrument that promoted inclusive education as a right and shifted the disability paradigm from a medical model to a social model (Stubbs, 2008; De Beco, 2018). The social model looks at disability as a result of the environment, thus, the need to change the system by removing attitudinal, cognitive, physical, and economic barriers (Mitra, 2006; Stubbs, 2008; De Beco, 2018).

At present, the SDGs, specifically Goal 4, called on States to ensure “inclusive and equitable quality education and promote lifelong learning opportunities for all”. The Incheon Declaration, which provided a framework for achieving SDG 4, asserts that education is a public good and a human right, and a key to eradicating poverty. As such, “all forms of exclusion and marginalization, as well as, disparities and inequalities in access, participation, and learning outcomes should be addressed” (United Nations Educational, Scientific, and Cultural Organization, 2016).

Inclusive education (IE) is a process of transforming education systems so that all children, no matter what race, religion, disability can be included in the mainstream setting. Achieving IE requires examining current policies, practices, and structures (Kinsela & Senior, 2008; Liasidou, 2015), as well as,

a strong commitment and support from national and local governments, school leaders, teachers, parents, and the community (United Nations Educational, Scientific, and Cultural Organization, 2009; Hayes & Bulat, 2017). At the system level, moving towards IE involves establishing legal and policy frameworks, developing management information systems, determining financing mechanisms, and instituting monitoring and evaluation mechanisms. At the school level, it requires changes in the school culture, the learning environment, pedagogical approaches, and student assessment.

In the Philippines, several legal frameworks promote the right to access education of all children. The more recent education reform, as embodied in the Republic Act (RA) 10533 entitled “Enhanced Basic Education Act of 2013”, reinforced the country’s commitment to provide the basic learning needs of children, taking into consideration the circumstances and diversity of all learners (Official Gazette, 2013). Basic education covers one year of kindergarten, elementary (6 years), and secondary (6 years). While enrolment data have shown improvements in school participation since the passage of the RA 10533, the 2017 Annual Poverty Indicator Survey showed that about 3.6 million children and youth ages 6 to 24 years old are still not in school. The most commonly cited reasons for not attending school include marriage/family matters (37.8%), lack of personal interest (24.7%), the high cost of education/financial concern (17.9%), employment (8.4%), and illness/disability (7.8%) (Philippine Statistics Authority, 2018).

The current government continues to implement and improve existing programs to facilitate access to, promote equity in, and improve the quality of education. It has committed to providing inclusive education that recognizes and respects learners’ rights to a relevant and quality education. At the basic education level, inclusion is defined as “providing access to and ensuring

participation of all learners in all aspects of life in school, in learning centers, and other learning environments.” It is operationalized through the provision of different programs responsive to the physical, intellectual, psychosocial, and cultural needs of a different types of learners (Department of Education, 2019). This paper focuses on the implementation of inclusive education in the Philippines, particularly the inclusion of children with special needs at the basic education level.

1.2 Purpose of the study

The global movement towards inclusive education is challenging education systems to shift from a segregated system to a more inclusive one. Strengthening inclusive education programs is one of the priorities of the current administration reflected in the Philippine Development Plan 2017-2022 as this is seen as a vehicle to provide greater access to education. Given the dearth of literature on the said topic in the country, this study aims to provide a general description of the status of inclusive education in the country’s public school system, particularly of the factors that facilitate or hinder its implementation. The study can also provide an initial assessment on how the current system supports implementing units in educating children with special needs in an inclusive setting. Findings of the research can be used as one basis for determining policy changes and program improvement mechanisms to strengthen implementation of IE. Further, as there are a number of bills on inclusive education that is still pending in Congress, the results of the study can be used as a reference in reviewing proposed bills.

1.3 Statement of the problem

The study seeks to determine the factors that influence implementation of inclusive education in the Philippines. Specifically, it would like to examine if the following factors - policy, resources, beliefs and attitudes, community support, and implementation structure affect the implementation of inclusive education.

CHAPTER 2: REVIEW OF RELATED LITERATURE

This chapter first presents a theoretical background on policy implementation, focusing on conditions that lead to the attainment of policy objectives, as well as, a review of literature on the concept of, approaches to, and factors affecting implementation of inclusive education.

2.1 Policy Implementation

Policy implementation, as defined by Mazmanian and Sabatier, “involves carrying-out of a basic policy decision, usually incorporated in a statute, or through executive orders and court decisions. The policy decision should, ideally, identify the problem/s to be addressed, stipulate the objectives to be pursued, and structure the implementation process” (Mazmanian & Sabatier, 1989). The succeeding discussion presents different models and perspectives to policy implementation.

Conditions for effective policy implementation

Mazmanian and Sabatier developed a framework for policy implementation that may be applied to all government programs that attempts to change a target’s group behavior in order to achieve a desired goal. They identified several conditions that can help achieve the policy objectives.

- *The program is based on a sound theory relating to changes in target group behavior.* This implies identifying all the factors that contribute to the problem to be addressed and relating these factors to the end-goal.
- *The policy has clear objectives and structures the implementation process.* Policy objectives that are clearly ranked in importance provides explicit directives for implementing officials. Further,

implementation should be accompanied with adequate funding, supportive and committed personnel, coordination within the agency, sufficient incentives for compliance, formal rules supportive of the implementing agency, and opportunity for interest groups to participate in the process and monitor performance.

- *The leaders of the implementing agencies possess managerial and political skills, and committed to policy goals.* Officials should possess the ability to develop good working relationships, influence opponents and target groups, mobilize support, manage financial resources, maintain high morale, and manage conflicts.
- *Organized constituency groups and key legislators support the program.* It is essential to maintain the support of key government officials so that implementing agencies will be provided with the necessary funds to carry-out the policy. Also crucial is the presence of interest groups that can monitor implementation, counter adverse decisions, and convince government officials that the program is a worthwhile endeavor.
- *The program is stable under changing socioeconomic and political conditions.* Socioeconomic conditions can affect the perception of how important the problem that the policy intends to address. As a problem loses its relative importance over time, political support for allocating resources is likely to decrease. (Sabatier & Mazmanian, 1979; 1989).

Not all conditions will be met at the initial stages of policy implementation. In instances where not all the conditions are present, there are several ways by which policy-makers can increase the probability of effective implementation over time. These include developing numerical indicators for monitoring program performance, involving stakeholders in the discussions, mobilizing a supportive interest group, and finding a champion in the legislative office. Long-term success can also be achieved if there is sustained effort and improvement across all the six conditions of effective implementation. In addition, structuring implementation in consideration of the social, cultural, technological, and historical context can enhance chances of success (Mazmanian & Sabatier, 1989)

The systems model of policy implementation

According to Van Meter and Van Horn (1975), policy implementation refers to the “actions of public and private individuals aimed at achieving the objectives stated in a policy decision”. They noted that the type of policy to be carried out influences the implementation process, i.e. whether it would require minimal or major reorganization, and the extent to which implementers agree with the program’s goal. They posited that successful implementation is possible if little change is demanded and goal agreement is high, as compared when there is major change and low consensus. Further, the possibility of success is higher for programs with major changes but high consensus, than those with low consensus and minor change. Thus, they perceived that goal consensus influences implementation more than the scope of change. With these assumptions, Van Meter and Van Horn developed the systems model of policy implementation. The model below (Figure 1) specifies six variables that influence performance and shows the relationship among these variables.

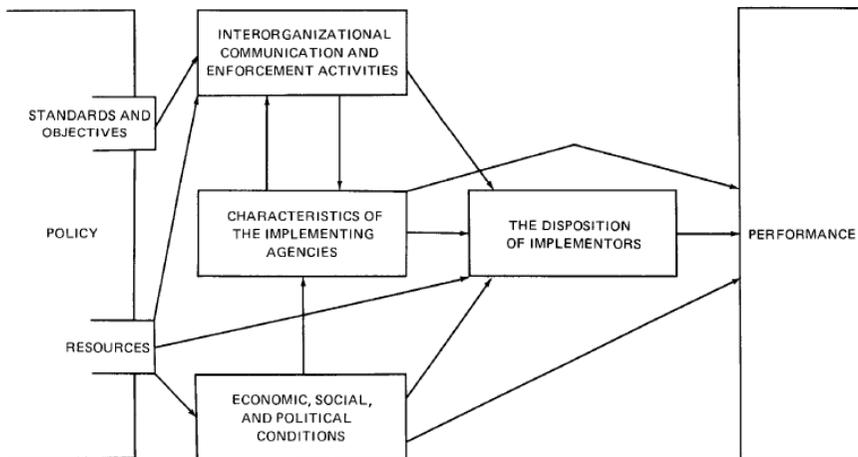


Figure 1. Van Meter and Van Horn’s Model of Policy Implementation Process.

- *Policy standards and objectives* explain the overall goals of a policy decision and serves as the parameter by which to assess if implementation has succeeded or failed;

- *Policy resources* may include funds or other incentives that may encourage effective implementation;
- *Inter-organizational communication* is concerned with how accurate and consistent the standards and objectives are communicated to implementers. Inconsistent or conflicting interpretations of standards and objectives make it more difficult to carry-out a policy. In terms of enforcement activities, two important activities can be done within an organization. First is that higher level officials can provide technical advice and assistance to subordinates in understanding rules and guidelines, structuring response to policy initiatives, and acquiring necessary physical and technical resources. Second is that superiors can use positive and negative sanctions;
- *Implementing agencies* may be characterized based on specific factors: (a) expertise and the size of the agency's staff, (b) the degree of hierarchical control; (c) political resources; (d) organizational strength; (e) the degree of open communication; and (f) formal and informal relations with the policy-making body;
- *Economic, social, and political conditions* looks at how sufficient the economic resources are to support successful implementation, how socioeconomic conditions will be affected by the implementation, what is the reaction of the society, and the extent to which private interest groups are organized to support or oppose the policy;
- The *disposition of implementers* is perceived to affect policy implementation. Three elements are seen to affect the implementers' capacity and commitment to carry-out the policy: understanding of the policy, direction of response toward it (negative, positive, or neutral), and the intensity of response. A policy that is widely accepted by the implementers has greater chances of being successfully implemented. On the other hand, a policy may be rejected because it contradicts personal values, self-interest, or relationships within the organization (Van Meter & Van Horn, 1975).

Social policy implementation

Berman & McLauhlin's (1976) review of three education programs, hypothesized that implementing significant innovations in a school system

must be premised on the process of mutual adaptation. They noted that the project must be contextualized to the institutional setting or vice versa during the implementation phase in order to achieve the expected outcomes. Three factors were assumed to influence implementation and project continuity – project characteristics, institutional setting, and federal policies. Results of the study revealed that the scope of change in the implementer’s behavior, choice of implementation strategy, and institutional setting, particularly organizational climate and individual commitment are the main factors affecting educational innovations. Meanwhile, the differences in funding levels, number of beneficiaries, and concentration of financial resources had small to generally insignificant effects on project outcomes. Similarly, national policies were mainly instrumental in the initiation phase but did not much have influence on project outcomes. Thus, educational innovations depend primarily on internal factors and decisions, than on inputs from outside the organization.

Berman (1978) described two implementation approaches in response to the unsatisfactory results of social policies – programmed implementation, and adaptive implementation. The programmed approach gives prominence to “clarity, precision, and comprehensiveness of the initial policy”. Meanwhile, the adaptive approach is “concerned with establishing acceptable rules that allow multiple participants to negotiate and compromise during the implementation stage”. They noted that the programmed approach can be more effective in instances where only minor changes, while adaptive implementation is more applicable when major changes on existing routines have to be made.

Determinants of effective education policy implementation

Viennet & Port (2017) noted that implementing education policy is a complicated and evolving process that engages many stakeholders. It covers a

variety of issues such as equity, the quality of learning outcomes and learning environments, funding, governance, and evaluation mechanisms. Given the multiplicity of issues that need to be addressed, Viennet & Port (2017) identified four dimensions that are crucial in implementing education policy.

- *Policy design.* The policy needs to define the problem that it seeks to address, as well as, clearly set its goals and targets.
- *Stakeholder engagement.* Education policies involve multiple stakeholders. At the school level, this include principals, teachers, students, and parents, while local level stakeholders include school boards, local authorities, and the community. Implementer's belief systems, interests, motivations, and skills affect policy implementation.
- *Institutional, policy, and societal context.* The laws, rules, norms, and structure and levels of decision-making can influence the pace by which a policy gets implemented. Social condition can influence the values within the education system which can affect the way implementers develop strategies and carry-out the policy.
- *Implementation strategy.* This include determining policy instruments (e.g. training, incentives), identifying mechanism for stakeholder engagement, amount and quality of resources, and monitoring mechanisms (Viennet & Port, 2017).

Achieving success in implementing policies is a difficult undertaking. As earlier mentioned, there are different factors that affect the implementation process, and the relative importance of one factor over the other changes across time. Mazmanian & Sabatier (1989) noted that in the short-term, effective implementation is contingent upon the strength of the initial policy (i.e. clarity and consistency of policy), the delegation to a sympathetic agency, formal access of a supportive community and the availability of their resources, commitment of agency officials, and the presence of a champion. In the long-term, however, changing socio-economic conditions, as well as, the ability of

the public to sustain its organized presence and intervene when necessary can determine the probability of success.

2.2 The Evolution of Inclusive Education

The practice of educating children with special needs (CSNs) started with creating separate educational programs that will cater to their needs. By mid-1990s, special needs education shifted from segregated educational placements to mainstreaming, where CSNs spend part of their school day in mainstream classrooms (Engelbrecht & Artiles, 2016).

The move towards inclusive education was first put forward at the World Conference on Education held at Jomtien, Thailand in 1990. In the said conference, delegates from 155 governments, 20 intergovernmental organizations, and 150 nongovernment organizations discussed aspects of ensuring education for all children, youth, and adults. The World Declaration on Education for All (EFA) urged states to develop measures that would provide equal access to education for girls and women, underserved groups such as street and working children, indigenous people, refugees, and persons with disabilities. It directed governments and private sector to mobilize human and financial resources to ensure access and equity. Specifically, it called for increased public sector allocation for basic education services (United Nations Education, Scientific and Cultural Organization, 1990; Peters, 2007).

The need to expand access to education for persons with disabilities was later on asserted in the Salamanca Statement crafted during the United Nations Educational, Scientific, and Cultrual Organization (UNESCO) World Conference on Special Needs Education in 1994. The Salamanca Statement was considered as the first international legal instrument to advocate for

inclusive education. It stipulated that all children should participate in school regardless of their physical, intellectual, social, and linguistic differences. Further, it emphasized that all children should learn together, wherever possible. Inclusive education (IE), thus, shifted from the narrow focus of special education to addressing potential forms of marginalization and discrimination in education (Engelbrecht & Artiles, 2016; De Beco, 2018).

In 2000, the Dakar Framework was developed at the World Education Forum. Participants in the conference reaffirmed the vision of the Jomtien Declaration and established the new goal of providing every child with primary education by 2015 (Peters, 2007).

In 2006, the Convention on the Rights of Persons with Disabilities (CRPD) was adopted which called for developing inclusive education system at all levels. It directed State Parties to ensure that persons with disabilities (PWDs) have access to free and compulsory basic education and the general education system. In cases where full inclusion was not yet feasible, governments must provide a range of services and program options catering to PWDs. Further, “reasonable accommodation” and individualized support has to be provided to facilitate effective education of PWDs. The CRPD also directed State Parties to allocate sufficient financial and human resources to support the implementation of inclusive education (United Nations, n.d.). The adoption of the CRPD led the rights-based approach to IE and shifted the disability paradigm from the medical model to a social model approach (Stubbs, 2008; De Beco, 2018).

More recently, the Incheon Declaration which supported the implementation of the Sustainable Development Goal 4 called on governments to ensure inclusive and quality education for all learners regardless of gender,

ethnicity, socio-economic status, and disability. While the Declaration did not specifically define IE, it emphasized on “addressing all forms of exclusion and marginalization, disparity, vulnerability and inequality in education access, participation, retention, completion, and learning outcomes”. It also recognized the challenges PWDs face in accessing quality education, thereby, particular attention should be given to ensure access to quality education (United Nations Educational, Scientific, and Cultural Organization, 2016).

2.3 The Concept of Inclusive Education

The philosophy of inclusive education is embedded in the belief that education is a fundamental human right. Under the CRPD, IE was viewed as “a process of systematic reforms in education to address barriers and provide all students with learning experiences and environment that corresponds to their needs” (De Beco, 2018). Likewise, the UNESCO, in its policy guidelines, defined IE as “a process of strengthening the capacity of education systems to reach out to all learners” (United Nations Educational, Scientific, and Cultural Organization, 2009). This implies that education systems need to recognize the different needs of children and must endeavor to remove barriers to learning.

Ainscow (2005) described inclusion as a continuing search for more appropriate ways of responding to the different needs of learners. It is concerned with the environment where children are educated, the quality of their participation, and their learning outcomes. It involves identifying and removing barriers to enable all children to participate in learning, collecting and evaluating data to improve policy and practice, and using information to encourage problem-solving (Ainscow, 2005).

Several researchers (Burnstein, Sears, Wilcoxon, Cabello, & Spagna, 2004; Peters, 2007; De Beco, 2018) defined inclusive education as the placement of children and youth with disabilities, regardless of their ability, in mainstream schools and classrooms with their non-disabled peers. It requires providing adequate instructional support system for these learners such as a flexible curriculum, trained teachers, and a school community culture that embraces diversity (Peters, 2007).

Engelbrect & Artiles (2016) and De Beco (2018) noted that definitions and practices of IE differ from one country to another. Some countries associated IE with a broader focus of including all children who have been excluded from mainstream schools, while others defined it in terms of providing children with disabilities (CWDs) access to regular classrooms.

2.4 Benefits of Inclusive Education

Inclusive education benefits both students with and without disability. The positive impact for all students is dependent on factors such as attitudes of educators and the availability of resources to serve the needs of all children (Burnstein, et. al. 2004).

In their review of literature, Abery, Ticha, & Kincaide (2017) noted that several studies revealed that students with and without mild disabilities in mainstream settings showed greater academic progress compared with those in special schools. Further, the presence of CWDs had no negative impact on the achievement of other students without disability. Similarly, educators and parents in three (3) Southern California schools reported academic success among 18 children with disabilities enrolled in inclusive programs. Progress was determined based on the teacher's observation, children's individualized

education program, or informal assessment (Downing & Peckham-Hardin, 2007). Meanwhile, the impact on academic progress was mixed in Dessemontet, Bless, & Morin's (2011) research among 68 children with intellectual disability placed in mainstream schools and special schools. The results of their comparative study showed no difference in math skills between the two groups, but a slight significant difference in literacy skills.

Roach (1995, as cited by Lipsky & Gartner, 1997) found in his evaluation of school districts in the United States of America that the general student population showed improved self-concept and problem-solving skills, as well as, acquired more accepting attitudes about persons with disabilities. Burnstein, et. al. (2004) and Downing & Peckham-Hardin (2007) noted similar results when teachers and parents from the schools they studied were asked about the effect of inclusion on students without disability.

In terms of social outcomes, Roach (1995, as cited by Lipsky & Gartner, 1997) noted that children without disabilities acquired social and communication skills that were undeveloped when they were in segregated settings. Abery, Ticha, & Kincaide (2017), likewise, found in some of the literature they reviewed that improved social skills was identified as an effect of IE. Other researches, however, indicated that students with disabilities experienced social isolation when placed in inclusive classrooms. Dessemontet, Bless, & Morin (2011), meanwhile, observed that there was no difference between the progress made in adaptive behavior between children with intellectual disability placed in mainstream classrooms and special schools.

2.5 Approaches to Inclusive Education

Making education more inclusive is a long-term and continuing process that necessitates changes to the whole education system – school-level, district, and the national government. It includes an assessment of a school or school district’s available infrastructure, as well as, the active involvement of all stakeholders in the planning, implementation, and evaluation process (Abery, Ticha, & Kincaide, 2017). Further, it entails a paradigm shift from seeing the student as a problem to recognizing that learning difficulty comes from the environment (Kinsela & Senior, 2008; United Nations Educational, Scientific and Cultural Organization (UNESCO), 2017).

System’s approach

Several authors (Kinsela & Senior, 2008; Hayes & Bulat, 2017) used the systems theory as a framework for transforming education systems and schools to become more inclusive. Bronfenbrenner’s ecological theory of human development lent its influence to the systems theory. In Bronfenbrenner’s theory, the changes and interactions in the environment where a person lives affect human development. This environment was divided into four structures – microsystem, mesosystem, exosystem, and macrosystem. Each system was a place where people interacted face-to-face with one another (Bronfenbrenner, 1977; Neal & Neal, 2013).

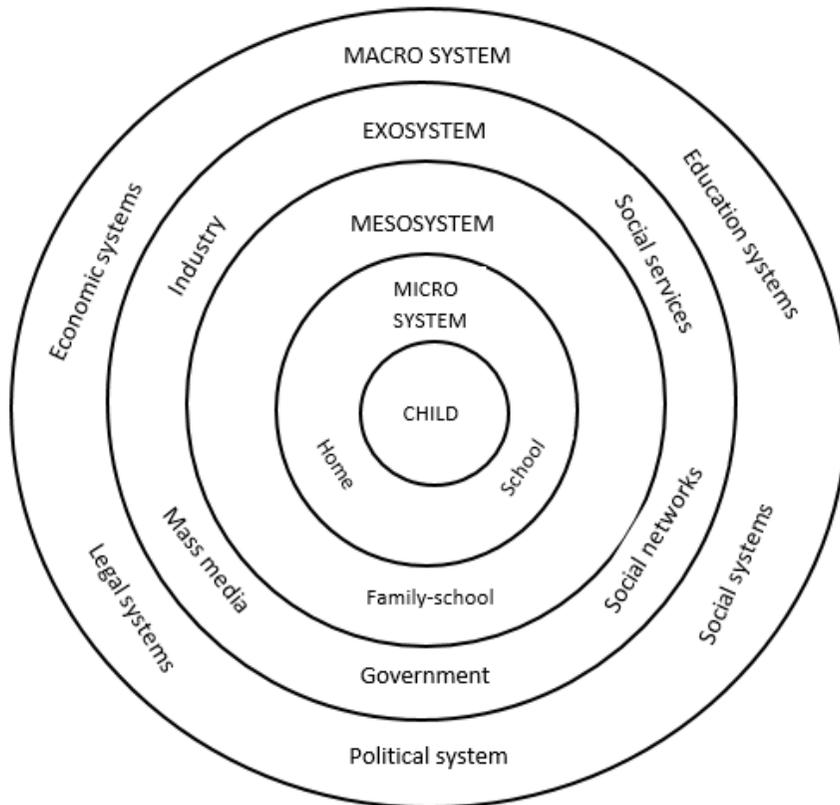


Figure 2. Components of Bronfenbrenner’s Ecological Systems Theory

In this respect, the systems theory presupposed that a change in any aspect of the environment could result to changes in other parts of the ecosystem which, in turn, could affect the lives of individuals. International organizations advocated that changes at the system level should be aligned with the human rights-based approach. The said approach emphasized three (3) principles: right to access education, right to quality education, and respect for rights. The right to access education entails identifying and removing barriers that hinder access to education. The right to quality education involves developing child-friendly learning environments and a relevant curriculum delivered using child-centered teaching-learning strategies. Respect for rights requires that education must be delivered in an environment that respects

cultural differences and participation rights of a child (Asian Development Bank, 2010; UNICEF, 2012).

Hayes & Bulat (2017) noted that a systems approach to IE involves coordination, shared responsibility and commitment across various stakeholders within and outside of government and between national and subnational governments. Further, developing IE systems require reviewing structures, practices, and policies, as well as, changing the culture and attitudes at multiple levels (Kinsela & Senior, 2008; Ainscow & Sandill, 2010; UNESCO, 2017). Studies conducted among schools in the US and Pacific Island showed that the context and culture in which the schools exists influence implementation of IE. Kozleski, Yu, Satter, Francis, & Haines (2015) noted that “culture and context shapes the rules, routines, tools, outcomes, relationships, and daily practices of the people working together in schools”. The teacher-respondents in their study underscored the effect of school culture in their teaching practices. In the Pacific Islands, Sharma & Loreman (2016) found that cultural beliefs and traditions were viewed as having a positive role in the implementation of IE such that respondents of the study highlighted the importance of a context-driven policy

Whole-school approach

The whole-school approach has also been seen as a way to transform schools into an inclusive learning environment. Comprehensive school-wide reforms focus on improving the whole school rather than specific segments of the school population (Desimone, 2002). Respondents on the study of Kinsela & Senior (2008) defined inclusive schools as one that meets the different needs of students, promotes participation by making appropriate accommodation, and has a system of identification, assessment, planning, intervention, and review.

Shifting from segregated to inclusive classrooms require schools to conduct a rigorous situation analysis - assessing readiness, identifying challenges, and determining how to move forward (UNICEF, 2012; Liasidou, 2015; Hayes & Bulat, 2017), as well as, changes in the organizational structure and functions and tasks of teachers (Burnstein, Sue, Wilcoxon, Cabello, & Spagna, 2004). Ainscow and Booth developed the Index for Inclusion to guide schools in becoming more inclusive. The Index covered three dimensions: creating inclusive cultures, producing inclusive policies, and evolving inclusive practices, and can be used in producing school development plans and evaluating progress. Different models have been suggested to transform schools from a segregated to an inclusive system such as developing resource centers, use of itinerant teachers, and engaging teacher assistants (Hayes & Bulat, 2017). In the process of change, involving teachers in the planning and decision-making process can help build ownership and sustain reforms (Burnstein, et al, 2004; Ainscow, 2005).

Capability approach

Several scholars identified the capability approach as a model for inclusive education. Amartya Sen developed the capability approach which was described as a “set of interrelated theses in welfare economics, particularly on the assessment of personal well-being, poverty, and inequality.” It has two main interrelated concepts – functionings and capabilities. Functionings refer to the different roles that persons may take on and its related tasks and what he or she achieves, while capabilities are the “practical opportunities.” Achieving a given capability depends on the person’s environment, personal characteristics, and ability. Applied to inclusive education, the capability approach calls for a holistic review of how an education system enhances and hinders an individual from acquiring functionings (Mitra, 2006; Dalkilic & Vadeboncoeur, 2016).

The relational inclusion model

Building on the principles of the capability approach, Dalkilic and Vadeboncoeur (2016) developed the Relational Inclusion model. In this model, IE should provide equal opportunity for all children to actively participate in their own learning and be the outcome of an education system that supports student engagement. The said model has five core principles: 1) context and culture responsive practices, 2) holistic and child-centered pedagogy, 3) flexible educational practices based on children's functionings, 4) increased participation in classroom and societies, and 5) relationship-building between educators and parents. Thus, the culture and context of children should be taken into consideration when deciding practices that will improve children's capabilities.

Other approaches

De Beco (2018) suggested a confluence of the capabilities theory and recognition theory in order in achieving IE. The capabilities theory recommends that a higher amount of resources be allocated to CWDs in order for them to acquire "essential educational functionings". Meanwhile, the second approach gives emphasis on providing the resources needed to equalize the social status of the members of society.

2.6 Factors affecting implementation of inclusive education

Ensuring the inclusiveness of education has been challenging in both developed and developing countries. Researches on IE showed that the lack of trained teachers, poor infrastructure, reluctance on integrating CSNs in the regular classroom, and large class size have affected the implementation in some countries (Stofile, 2008; Chhabra, Srivastava, & Srivastava, 2010;

Pappas, Papoutsis, & Drigas, 2018). Reports from American schools showed that systemic issues such as policy, funding, personnel, curriculum, and student assessment, need to be addressed to ensure successful and continuing implementation (Lipsky & Gartner, 1997). McLeskey and Waldron (1996, as cited by Andreasen, 2014) noted that developing inclusive programs go through three stages: 1) addressing teacher beliefs and values regarding inclusion; 2) developing an inclusive program with careful planning; and 3) implementing, reviewing, and revising the plan as needed. The succeeding discussion looks into each of the factors that are observed to influence the implementation of inclusive education.

National policies

Strong government support and specific legislation is needed to realize the vision of inclusiveness. Policies and laws are essential as they possess the ability to guarantee the rights of the beneficiaries, set the timeframe of implementation, stipulate the consequence for non-compliance, establish accountability and evaluation procedures, and earmark financial resources (Eleweke & Rodda, 2002). Further, a national policy framework is particularly important for governments with devolved structures so that national and local governments are able to work towards the same goal (UNICEF, 2012).

National policies should be in line with international commitments, clearly define disability and inclusive education, and reflect specific objectives a country is aiming to achieve (Hayes & Bulat, 2017; Asian Development Bank, 2010). Having a clear understanding of IE is important as different perspectives can lead to different outcomes (Ainscow, 2005; Stubbs, 2008). Plans, meanwhile, should be accompanied by commitment and motivation of leaders, competent personnel, resources, and funding. Mazurek & Winzer (2010) pointed-out that a few developing countries have no legislative guides covering

special needs, while those who have are outdated or do not provide clear directives. Srivastava, Boer, & Pijl (2015), meanwhile, noted that IE policy in some countries in Asia and Africa have been revised based on international statements with revisions specifically mentioning students with disabilities and stipulating the roles and responsibilities of implementing agencies. However, it was also observed that legislation in some developing countries lack a clear definition of who are marginalized (Engelbrect & Artiles, 2016). In crafting policies and plans, the consultative process involving school personnel must be done to build ownership and facilitate better implementation (Kinsela & Senior, 2008; Liasidou, 2015; Hayes & Bulat, 2017; Viennet & Port, 2017).

Financial Support

Financing is a critical factor and a primary concern with regard to implementing IE. Cromwell (2004, as cited by Andreasen, 2014) noted that appropriate financial support is important in order to develop programs based on students' needs. UNICEF (2012) contends that investing in system reform to meet the needs of IE is the most cost-effective use of funds as it has the ability to improve the education of all children. Investments include teacher and staff training, infrastructure improvement, curriculum development, and learning materials and equipment provision. In devolved structures, local authorities must be provided with the necessary budget to implement services and programs, while ensuring transparency and accountability in the use of funds.

There are three (3) proposed models of financing IE – input or per capita model, resource-based, and output-based. The input or per capital model allocates funds based on the number of CSNs. The resource-based model is a type of funding based on services provided to CSNs. Output-based model links funding to cost effectiveness based on outcomes. In deciding which financing model to use, governments need to take into consideration the benefits of

inclusion and economic factors, and determine an adequate flexible funding and allocation formula (UNICEF, 2012). Cosier & Causton-Theoharis's (2010) study on the effect of economic and demographics variables on inclusion level revealed that expenditure for general education and special education predict the level of inclusion. School districts with a higher percentage of students with disabilities being taught in the general classroom spend more for general education and less per pupil on special education students. A possibility that may explain this finding is that the schools are beginning to merge special education funds and resources.

Monitoring and Evaluation System

Monitoring and evaluation is an essential component of any reform program. Data is useful in evaluating progress towards achieving IE, assessing the impact of interventions, and reviewing the effectiveness of policies and processes (Ainscow, 2005; UNICEF, 2012). When determining the effectiveness of an inclusive system, the macro (system), meso (schools and its context), and micro (individuals and classrooms) levels should be assessed. Within these levels, the input-process-output model can be used to determine which areas are facilitating or hindering the attainment of inclusive education (Loreman, 2014).

Table 1. Themes for developing inclusive education measures (Loreman, 2014)

Inputs	Process	Output
Policy Staff professional development and teacher education Resources and finance Leadership Curriculum	Climate School practices Classroom practices Collaboration and shared responsibility Support to individuals	Participation Student achievement Post-school outcomes

Measuring program quality and student outcomes requires establishing clear indicators (Ainscow, 2005; UNICEF, 2012; Liasidou, 2015). Data such as prevalence rate, enrolment, attendance, completion, achievement, the number of teachers trained, the number of schools with inclusive policies, the percentage of children in inclusive classroom are important in evaluating progress towards achieving IE and developing appropriate policies (Asian Development Bank, 2010; UNICEF, 2012).

National curriculum

IE requires a flexible national curriculum to serve the needs of different learners through differentiation or adaptation. In addition, the curriculum must focus on developing cognitive skills, as well as, building essential life skills and values that promote human rights (Asian Development Bank, 2010; UNICEF, 2012; United Nations Educational, Scientific and Cultural Organization, 2017).

School leadership

School leadership is seen as a crucial element in achieving IE as principal leadership is a key factor in reforming school practices (Desimone, 2002; Burnstein, et al, 2004), and influencing other elements such as resources and finance allocation, and collaboration and shared responsibility (Hosshan, Stancliffe, Villeneuve, & Bonati, 2019). As such, school leaders need to establish an environment that supports and promotes the commitment to inclusive practices (Asian Development Bank, 2010; Ainscow & Sandill, 2010; United Nations Educational, Scientific and Cultural Organization, 2017) through organizing personnel, ensuring access to professional development, being involved with student outcomes, and building partnerships with the community (Lipsky & Gartner, 1997; Loreman, 2007). Further, a model of shared leadership, wherein school administrators encourage individuals within the school to participate in leadership functions, is viewed as an essential

mechanism in creating an inclusive school (Loreman, 2007; Ainscow & Sandill, 2010). A study on six inclusive schools in the U.S. showed that principals played an important role in transforming schools and building a culture that embrace inclusiveness. School principals demonstrated how to collaborate and work with others, as well as, showed commitment to becoming an inclusive school. They also ensured that teachers manage resources and organizes co-teaching and intervention groups (Kozleski, et.al, 2015). Similarly, a survey conducted in Colorado schools revealed that teachers recognize the importance of principal leadership in making inclusion work well. The respondents particularly noted that principals need to provide supports such as allocating planning time, providing teacher assistants, and organizing small class sizes (Horne & Timmons, 2009).

Training and professional development

IE requires that teachers have the necessary skills to use effective practices and be provided with opportunities to explore teaching methods. A number of literature (Burnstein, et al, 2004; Stubbs, 2008; United Nations Educational, Scientific, and Cultrual Organization, 2009; Asian Development Bank, 2010; UNICEF, 2012; Liasidou, 2015; Hayes & Bulat, 2017; Babić, Simic, & Friedman, 2018; Cromwell, 2004 as cited by Andreasen, 2014; Hag and Mundiam, 2012 as cited by Hosshan, et.al, 2019) emphasized the importance of pre- and in-service training in enabling education professionals to acquire competencies and adapt current inclusive practices such as collaborative teaching, child-centered pedagogy, and using an individualized education plan. A survey among Colorado teachers showed that training was perceived to be essential in effective integration of CSNs (Horne & Timmons, 2009). A review of studies conducted in developing countries reported that teachers feel having inadequate knowledge and skills to meet the needs of students with disabilities (Srivastava, Boer, & Pijl, 2015). In some Southeast

Asian countries, however, most regular teachers receive no formal pre-service or in-service training in teaching CSNs. This lack of special training for general education teachers makes implementation more challenging (Hosshan, et.al, 2019). This finding resonates with earlier studies on school reforms which revealed that lack of training was perceived as a factor for slow or weak implementation (Desimone, 2002).

Positive beliefs and attitudes

Several studies have been conducted to determine predictors of a teacher's attitude toward inclusion. Forlin's (1995, as cited by Avramidis & Norwich, 2002) study revealed that younger teachers and those with fewer years of experience tend to be more supportive of inclusion, while increased social contact could produce unfavorable view because of the stress factor. Taylor (2003) noted that in one study regarding teacher's perception of inclusion, teaching experience brought about differences in views such that the most experienced teachers were the most negative about reform. Other studies showed that the severity of disability brought varying degrees of acceptance among teachers (Scruggs & Matropieri, 1996 as cited by Taylor, 2003; Pappas, Papoutsis, & Drigas, 2018). Adeniyi, Owolabi, & Olojede (2015) noted that previous researches showed that the length of teaching experience and contact with CSNs, as well as, educational qualification could predict inclusive practice.

Positive beliefs, attitudes, and actions of teachers are crucial in achieving IE as teachers create the environment in which children learn (Ainscow & Sandill, 2010). Adeniyi, Owolabi, & Olojede's (2015) study involving classroom teachers and head teachers revealed that a favorable mind-set towards inclusion was a determinant of successful IE in Lagos State, Nigeria. Different strategies have been proposed to bring about a positive change which

includes frequent and regular meetings (Berman & McLauhlin, 1976), training (Berman & McLauhlin, 1976; Loreman, 2007), and organizing professional learning communities (Andreasen, 2014).

Community engagement

Collaboration and cooperation between teachers, with specialist, parents, and community is also seen as a crucial element in implementing IE. Collaboration among teachers through study groups or communities of practice can bring about innovative ways to meet the needs of a diverse group of children. Special education teachers, given their expertise, can act as a resource person for and work together with general education teachers in developing comprehensive education programs for all learners (Lipsky & Gartner, 1997; Burnstein, et. al, 2004; Hayes & Bulat, 2017). As such, it is important that general and special education teachers be accorded time to plan and work together in order to develop strategies to address the needs of diverse learners.

Special schools and units, as well as regular schools that have successfully transitioned to an inclusive school can serve resource centers or sites for study visits of other educational institutions trying to become more inclusive (UNICEF, 2012). Specialists such as counsellors, psychologists, and therapists can assist general education teachers in identifying students with learning needs and determining other educational services that could support children in school (Eleweke & Rodda, 2002; Hayes & Bulat, 2017). In addition, therapists can help students increase their function and independence by building the necessary competences i.e. gross motor skills to facilitate mobility, communication skills (Andreasen, 2014).

Getting parents involved can help increase acceptance of disability, improve learning outcomes, and develop better classroom behaviors (Loreman, 2007; UNICEF, 2012; Hayes & Bulat, 2017). Participants in Kozleski, et. al's (2015) study emphasized the importance of communication between school and home, and involving parents in the process of transforming schools to become inclusive. Similarly, participants in Sharma and Loreman's (2016) study recognized the important role of families, but noted that barriers such as parents' attitudes toward their children and economic situation hinder families from sending their children to school. In some instances the parents oppose the shift to inclusive education because of fear that their children will not receive the needed services or will not be safe in an inclusive setting (Hayes & Bulat, 2017).

Cooperation among general and special education teachers and parents are important elements in moving towards IE as it helps in providing a comprehensive and integrated service for all children (Burnstein, et. al,2004), In addition, a good working relationship among faculty and staff can help in creating an inclusive learning environment and developing appropriate teaching strategies (Kozleski, et.al, 2015). Babic, Simic, and Friedman (2018), in their study of schools considered as successful implementers of IE in Serbia, identified three school-level factors affecting implementation - collaboration of stakeholders, open communication among staff, and specialists' support.

Resources and infrastructure

Providing the required resources and infrastructure support is essential in removing physical and communication barriers and allowing every learner to participate in education. Coleman and Heller (2009, as cited by Ileri, King'endo, & Thurania, 2019) emphasized that lack of services and devices hinder students from performing their tasks more efficiently and independently.

Such is the case in many schools in developing countries where the essential educational materials were not provided or inadequate (Eleweke & Rodda, 2002). As such, national standards should require schools to implement accessibility features such as ramps and other innovative means to secure mobility (UNICEF, 2012; Hayes & Bulat, 2017). Assistive technology, when used well, can facilitate the learning of students with special needs. Adeniyi, Owolabi, & Olojede's (2015) research revealed that the availability of materials have the highest and positive relative effect on IE practice in Nigeria. Similarly, Ileri, King'endo, & Thurania (2019) found that among public secondary schools in Kenya, physical resources had a moderate positive correlation and significant linear relationship with the implementation of inclusive education.

2.7 Inclusive Education in the Philippines

The right to education in the Philippines is entrenched in the country's constitution. Article XIV, Section 1 of the constitution asserts that "the state shall protect and promote the right of all citizens to quality education at all levels, and take appropriate steps to make such education accessible to all."

The beginnings of educating children with disabilities

The education of children with disabilities (CWDs) in the country began as early as 1907 with the establishment of the Philippine Insular School for the Deaf and Blind. Later on, these schools were re-organized to become what is currently known as the Philippine School for the Deaf and the Philippine National School for the Blind. By the mid-1970s, special education classes were established in 31 regular schools in the Schools Division of Manila City. However, the facilities and resources for the students were inadequate given the limited funds. To improve education services for PWDs, the special education classes were consolidated into six special education (SPED) centers or *Silahis*

(rays of the sun) centers which were located within the large regular schools (Inciong & Quijano, 2004).

Silahis centers became the country's model in response to the Salamanca policy of inclusion which was adopted by the Philippines. The SpEd centers offered different types of programs or placement – special classes, resource rooms, mainstreaming, and integration. Integration refers to the placement and provision of SPED services wherein a student attends a special class and non-academic regular classes. Mainstreaming is the type of placement where a student attends a regular class after being taught in a special class. Inclusion is the placement of a CWD in a regular education class with individualized support services from the *Silahis* center (Inciong & Quijano, 2004).

In 1997, through DECS Order No. 26, all schools division were mandated to organize at least one SPED center to serve children with special needs (CSNs). These centers were required to adopt the inclusive education concept or program placement suited to the learners' needs. Further, the SPED center should serve as a resource center to support CSNs in regular schools, assist in the conduct of in-service training, produce appropriate teaching materials, and regularly assess CSNs (Department of Education, Culture and Sports, 1997).

Inclusive education and improving access to quality education

In 2009, the Department of Education (DepEd) released DepEd Order No. 72 which adopted inclusive education (IE) as a strategy to improve participation rates in basic education. IE, in this context, referred to the education of children with special needs (CSNs) in the regular schools. IE for CSNs was composed of five components – child-find, assessment, program options, curriculum modifications, and parental involvement. In terms of program options, three alternatives were identified: 1) self-contained class for

children with similar disabilities handled by a SPED teacher, 2) inclusion or placement in the regular class, and 3) resource room where children are pulled-out of the regular classroom for a small group or one-on-one instruction.

The practice of IE was further given importance in Republic Act (RA) 10533 or the Enhanced Basic Education Act of 2013 or more commonly known as the K to 12 Law. Under this Act, programs should be designed to address the physical, cognitive, psychosocial, and culture needs of learners. These include programs for the gifted and talented, learners with disabilities, indigenous peoples, Muslim Filipinos, and learners under difficult circumstances (i.e. children displaced by armed conflict or disasters, abused, and in isolated areas). The law also mandated the use of mother tongue as a medium of instruction, and the development of a flexible curriculum that schools can localize and enhance based on the local context (Official Gazette, 2013).

At present, inclusive education in the country adheres to the rights-based approach. Different programs are being implemented to ensure the access of children to quality education. These programs are: 1) special education for gifted and students with special needs, 2) Indigenous Peoples (IP) education which adopts the IP's learning system and integrates indigenous knowledge, skills, and practices in the curriculum, 3) Madrasah education for Muslim Filipinos, 4) multi-grade education, 5) alternative delivery modes (ADMs) which uses flexible and distance learning strategies to accommodate learners who are unable to attend regular classes due to financial constraints, impairments, or those living in far-flung areas, and 6) Alternative Learning System (ALS) for out-of-school youth and adults. DepEd Order No. 21 series of 2019, annex 5 provides the policy framework for the implementation of inclusive education for basic education. It lays down general guidelines on

developing learning resources, learning delivery, educational assessment, learning environment, teacher professional development, school management, governance support, and monitoring and evaluation.

Studies on implementing IE in the Philippines showed that school personnel have no resistance on the practice of IE. However, they noted the need for training and materials in order to meet the diverse needs of learners (Muega, 2016; Andaya, et al., 2015).

The international agreements served as the impetus for countries to adopt inclusive education as a policy for educating children with diverse needs. Implementation of education policy is challenging because of the multiplicity of concerns and actors involved. Inclusive education, particularly, have been challenging in some countries due to lack of needed inputs and negative attitudes towards including children with special needs in the general education classroom. Literature on IE revealed that transforming education systems to become more inclusive entail changes at all levels of the system. Reforms, however, should be participatory to create a common understanding and gain ownership, which could translate to better implementation and outcomes. Various factors have been identified as contributory to successfully implementing IE. These factors include - clear policy, adequate funding, commitment and motivation of governments and education leaders, competent teachers, physical resources and infrastructure, regular monitoring, and community participation.

2.8 Conceptual Framework

The conceptual framework of this study illustrates the factors that affect the implementation of inclusive education based on the review of literature.

The factors, identified through literature review, were grouped into four broad themes, namely: policy, human resources, support to implementers, and monitoring.

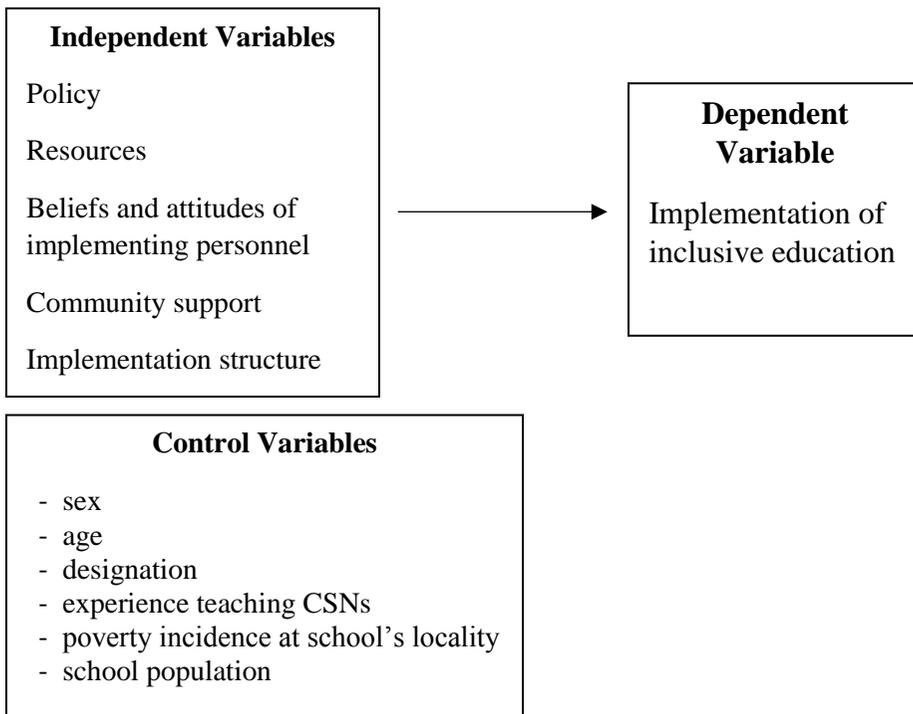


Figure 3. Conceptual framework

Policy documents articulating the goals and objectives of inclusive education demonstrate commitment of governments and guide implementers and the community on what needs to be achieved. Resources include physical, financial and human resources that are necessary to implement a policy. Beliefs and attitudes refer to the views of implementing personnel. Community support refers to how stakeholders collaborate and are engaged to support children with special needs in school. Implementation structure includes veto/clearance points, and coordination within levels of the organization. The aforementioned factors are perceived to facilitate implementation of inclusive education which can be measured through the number and proportion of children with special needs in the regular classroom.

CHAPTER 3: METHODOLOGY

This chapter describes the research design and procedures for gathering and analyzing data for this study.

3.1 Research Design

A survey research design was used to identify the factors that influence the implementation of inclusive education in public schools. Surveys are used when a researcher wants to describe, explain, or explore a phenomena. In a survey research, information is primarily gathered from individual people who serve as respondents for the study (Babbie, 2013).

Quantitative and qualitative data can be gathered through a survey. Questionnaires, which is the primary tool for conducting surveys, can use open-ended and close-ended questions. Open-ended questions allow the respondents to provide their own answers, while close-ended questions require respondents to select from a given list (Babbie, 2013).

3.2 Data gathering instruments

A self-administered questionnaire was designed based on previous researches and existing literature, and available inclusive education checklists. Questions on policy and implementation structure were based on the UNESCO's (2009) policy guidelines on inclusion. Questions regarding resources and community support were constructed following UNESCO's (2009) policy guidelines, Ainscow and Booth's (2002) index for inclusion, and Hayes and Bulat's (2017) inclusive education system checklist. Questions on

beliefs and attitude were patterned after previous researches (Adeniyi, Owolabi, & Olojede, 2015; Pappas, et al (2018).

The questionnaire consisted of two parts – 1) respondents profile, and 2) 18 close-ended questions where respondents were asked to express their views/perception using a five-point Likert scale. The form was, then, sent to the DepEd-National Capital Region (NCR) and division offices that specifically requested a copy for their review and validation. Recommendations were incorporated into the survey form such as additional items/statements, inclusion of open-ended questions, and restatement of instructions for clarity. The final questionnaire consisted of 33 items divided into three parts – 1) respondent’s information, 2) 28 close-ended questions using likert scale (Table 2), and 3) four open-ended questions.

Table 2. Study variables and corresponding questionnaire items

Variables	Survey items
Policy	<p>Policies provide a comprehensive definition of inclusive education</p> <p>Policies explicitly state the strategic directions, goals and objectives of inclusive education</p> <p>Policies encourage local flexibility in curriculum development.</p> <p>Policies provide guidelines on the assessment of children with special needs.</p> <p>Policies contain clear roles and responsibilities for every level of governance.</p> <p>Policies include monitoring and evaluation processes of inclusive education.</p>
Resources	<p>The school’s buildings have ramps and pathways to support mobility of students.</p>

	<p>Toilet facilities are suited for all children including children with special needs.</p> <p>The school have access to assistive devices (e.g. braille) to support the learning of children with special needs.</p> <p>The school have adequate materials for the learning of children with special needs.</p> <p>There is adequate funding from government to enhance implementation of inclusive education.</p> <p>Teachers receive sufficient training for inclusive education.</p>
Beliefs and attitudes	<p>All children should be taught in the regular classroom.</p> <p>Inclusive education is likely to improve the socioemotional skills of students with special needs.</p> <p>Inclusive education is likely to improve the socioemotional skills of students without special needs.</p> <p>Inclusive education is likely to have a positive effect on the academic performance of students with special needs.</p> <p>Inclusive education is likely to have a positive effect on the academic performance of students without special needs.</p>
Community support	<p>General education and special education teachers plan together to develop education programs for all learners.</p> <p>Guidance counselors assist teachers in identifying support services needed by the children.</p> <p>Parents are involved in decisions regarding their child's education.</p> <p>Parents are updated on the progress and concerns about their children.</p>

	<p>Coordinators in all levels of governance are well-trained.</p> <p>Coordinators in all levels of governance are well-equipped.</p>
Implementation structure	<p>Officials at the regional level encourage the development of inclusive practices.</p> <p>Officials at the division level encourage the development of inclusive practices.</p> <p>School leaders encourage the development of inclusive practices.</p> <p>There is a systematic information exchange between different levels of the basic education system.</p> <p>There are efforts to promote exchange of knowledge and expertise among teachers.</p>

Open-ended questions were used to supplement the Likert items. Questions focused on the recommendations for improving implementation, resources needed, role of parents, and other supports essential to enhancing the practice of inclusive education.

3.3 Participants of the study

As previously mentioned, public schools in the Philippines implement various programs to ensure inclusiveness of education, one of which is the program for students with special needs. For the purpose of this study, selected schools with special education centers at the National Capital Region (NCR) or Metro Manila were tapped. The special education resource centers serves as a model center for educating children with special needs and are tasked to assist in conducting in-service training, producing teaching materials, and assessing

children with special needs. Public schools were chosen as respondents for the study because 90 percent of primary school children are enrolled in state-run schools.

Literature on policy implementation noted that economic, social, and political conditions of an area can affect policy implementation. The schools divisions were, therefore, grouped based on socioeconomic characteristics of the city where the schools are located (e.g. poverty incidence and population). Due to limited time and funds, only ten schools were selected to participate in the research. School heads and teachers from each of the schools were tapped as respondents for the study.

Green (1991, as cited by Wilson Van Voorhis and Morgan, 2007) recommended that a sample size $N > 50 + 8$ (number of independent variables) is needed for testing multiple correlation, and $N > 104 + \text{number of independent variables (IVs)}$ for testing individual predictors. Following the said formula, where five (5) IVs are being tested, sample size for this study should be $N > 90$ for multiple correlation, and $N > 109$ for testing the IVs.

3.4 Data collection procedure

The researcher sent a letter to the Department of Education-National Capital Region to secure approval to conduct the survey in selected public schools with a SpEd center. Upon getting the endorsement of the regional office, a letter was sent to the division offices to also secure permission to administer the survey. Once the endorsement letter was obtained from the division office, a letter was sent to the principal or school head to get approval and schedule the distribution of the survey.

Distribution and collection of survey was done from August to September 2019. A total of 289 questionnaires were collected from the participating schools. Retrieved questionnaires were reviewed and forms with missing information or incomplete responses were not included in the final pool to avoid biases. After data cleaning, 200 questionnaires were used for data analysis.

3.5 Data analysis

Quantitative data gathered from the survey was tabulated in excel and analyzed using Stata version 14 software. Descriptive statistics, particularly frequency count and percentages, were used to present the respondent's profile. Responses on the close-ended questions were coded from 1 to 5 (1= strong disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree) and its mean and standard deviation were generated. Further, the survey results were subjected to factor analysis, specifically exploratory factor analysis (EFA) and multiple regression. According to Williams, Onsmann, & Brown (2010), factor analysis is used to reduce a large number of variables into a smaller set of variables, establish underlying dimensions between measured variables and unobserved constructs, and provide construct validity for self-reporting scales. EFA, specifically, aims to identify the factor structure for a set of variables (Stevens, 2009). Multiple regression, meanwhile, was used to determine the association between the dependent and independent variable.

Responses from the open-ended questions in the survey form were transcribed in excel. An open-coding was first conducted for the responses in each of the questions. Then, the responses were re-grouped into themes based on the variables used in the study.

CHAPTER 4: RESULTS AND DISCUSSION

This chapter presents the results of the survey conducted among public school principals and teachers on the implementation of inclusive education in special education centers. The results of the statistical analysis on the survey data are, likewise, presented.

4.1 Respondent's demographic characteristics

The table below presents the demographic profile of 200 respondents according to sex, age, designation, whether they have taught children with special needs (CSNs) in the regular class or not, and years of teaching CSNs. Females comprise 86.5 percent of the respondents, while males account for 13.5 percent. According to age, the largest proportion (21%) belong to the 38 to 42 year old age bracket, while age groups 53 to 57 and 58 to 63 had the smallest share (5.5%). Based on designation, the majority (71%) are regular teachers. In terms of teaching experience, 64 percent have taught CSNs in the regular classroom. Of those who have experience in teaching CSNs, 51 percent have taught CSNs for four (4) years or less, while less than 10 percent have taught for more than 13 years.

Table 3. Respondent's profile

Variable	Frequency	Percentage
Sex		
Male	27	13.5
Female	173	86.5
Age		
23-27	30	15
28-32	28	14
33-37	25	12.5
38-42	42	21
43-47	27	13.5
48-52	26	13
53-57	11	5.5
58-63	11	5.5
Designation		
School Head/Principal	5	2.5
Regular Teacher	142	71
Special Education Teacher	53	26.5
Taught CSNs in the regular class		
Yes	128	64
No	72	36
Number of years teaching CSN		
>4	67	51.94
5-8	31	24.03
9-13	21	16.28
14-17	2	1.55
18-21	0	0
22-25	6	4.65
26-29	2	1.55

4.2 Factor Analysis

As earlier mentioned, factor analysis is used to summarize data which allows for better interpretation of relationships between variables. As a first step, Bartlett and Kaiser-Meyer-Olkin (KMO) tests were done to identify the suitability of the data for factor analysis. A p-value of <0.05 in Bartlett's test, and 0.5 in the KMO tests indicate that there is a good degree of correlation for factor analysis (Williams, Onsman, & Brown, 2010). Table 4 presents the results of the Bartlett and KMO tests done on the variables under study. The p-value (0.000) and KMO (0.934) results indicated that the data was suitable for factor analysis.

Table 4. Factor test results

Bartlett test of sphericity	Chi-square	5598.854
	Degrees of freedom	378
	p-value	0.000
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.934

Exploratory factor analysis (EFA) was specifically conducted to determine the number of factors and which variables go together. Different criteria can be used to identify the number of factors to retain: 1) the Kaiser criterion which recommends retaining factors with greater than 1.00 eigenvalue, 2) Jolliffe's criterion which uses eigenvalue of 0.70 as the cutoff point, and 3) use of a scree plot which uses the point of inflection as the basis of determining the number of factors (Yong & Pearce, 2013).

Table 5 and Figure 4 shows the eigenvalues obtained when the data was subjected to factor analysis. Based on the aforementioned criteria, five (5) factors were retained. The first factor was defined as Policy, the second factor

as Resources, the third factor as Beliefs and Attitude, the fourth factor as Community Support, and fifth as Implementation Structure.

Table 5. Factor Matrix

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	15.30901	13.71841	0.6140	0.6140
Factor2	1.59060	0.09841	0.0638	0.6778
Factor3	1.49219	0.39751	0.0598	0.7377
Factor4	1.09468	0.12034	0.0439	0.7816
Factor5	0.97434	0.28569	0.0391	0.8207
Factor6	0.68865	0.07140	0.0276	0.8483
Factor7	0.61724	0.15193	0.0248	0.8730
Factor8	0.46531	0.07491	0.0187	0.8917
Factor9	0.39040	0.04191	0.0157	0.9074
Factor10	0.34849	0.03135	0.0140	0.9213
Factor11	0.31714	0.04470	0.0127	0.9341
Factor12	0.27244	0.03784	0.0109	0.9450
Factor13	0.23460	0.04139	0.0094	0.9544
Factor14	0.19320	0.02213	0.0077	0.9621
Factor15	0.17108	0.01631	0.0069	0.9690
Factor16	0.15477	0.01558	0.0062	0.9752
Factor17	0.13919	0.02678	0.0056	0.9808
Factor18	0.11242	0.01414	0.0045	0.9853
Factor19	0.09828	0.02486	0.0039	0.9892
Factor20	0.07342	0.01133	0.0029	0.9922
Factor21	0.06209	0.01502	0.0025	0.9947
Factor22	0.04707	0.01693	0.0019	0.9966
Factor23	0.03014	0.00633	0.0012	0.9978
Factor24	0.02381	0.00753	0.0010	0.9987
Factor25	0.01628	0.00625	0.0007	0.9994
Factor26	0.01002	0.00430	0.0004	0.9998
Factor27	0.00572	0.00613	0.0002	1.0000
Factor28	-0.00041	.	-0.0000	1.0000

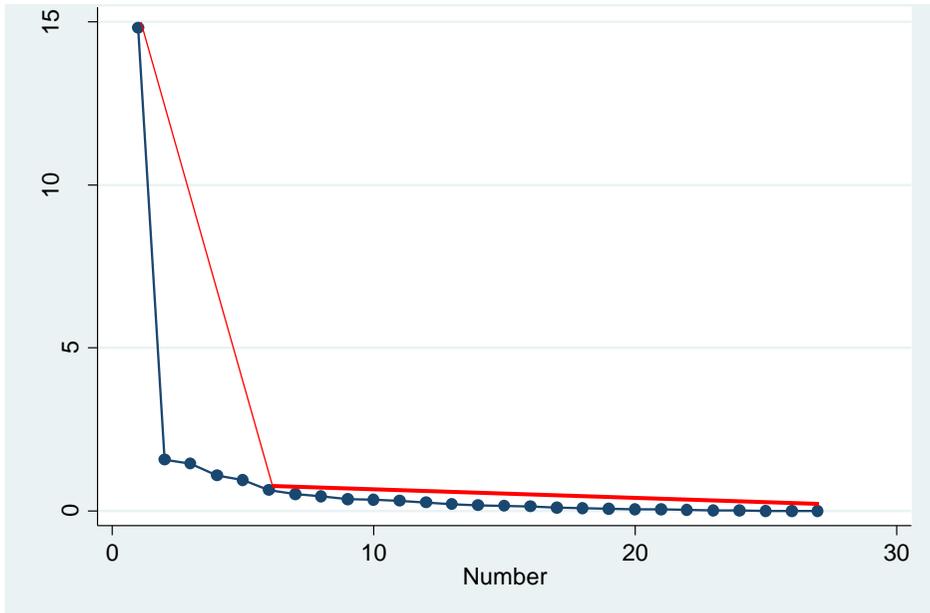


Figure 4. Scree plot of eigenvalues

Factor analysis produces factor loadings which measure how much a variable contributes to the factor. Further, the loadings represent the strength of the relationship between the variables and the factor. Factor loadings are rotated making each variable load on a few factors, while maximizing the high loadings on each variable. This, then, creates a simple structure for better interpretation (Yong & Pearce, 2013). An oblique rotation was used in this study to generate a more interpretable matrix. Oblique rotation generates factors that are correlated which usually produces more accurate results for researches involving human behaviors (Williams, Onsman, & Brown, 2010).

Loadings that cluster to -1 or 1 are said to affect the variable more. Stevens (2009) developed a matrix of critical values for determining the cutoff point of a factor loading for a specific sample size. For a sample size of $n=200$, the critical value is 0.182 which is then multiplied by 2. The cutoff for a sample size of 200 is 0.364. For the purpose of this research, the 0.40 cutoff point was used.

The factor matrix below shows the factor loadings for each variable representing the 28 items in the questionnaire. As earlier mentioned, factor 1 consists of all items that relate to policy, factor 2 on resources, factor 3 on community support, factor 4 on implementation structure, and factor 5 on beliefs and attitudes. The results of the rotated factor loadings showed that the item “*Inclusive education is likely to have a positive effect on the academic performance of students with special needs*” had insufficient loading and as such was excluded from further analysis.

Table 6. Rotated Factor Matrix

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Uniqueness
Pol1	0.7088					0.2872
Pol2	0.7685					0.2138
Pol3	0.7860					0.1904
Pol4	0.6562					0.2389
Pol5	0.7004					0.1914
Pol6	0.7242					0.2043
Res1		0.4804				0.4796
Res2		0.6451				0.3770
Res3		0.7145				0.4663
Res4		0.8677				0.1546
Res5		0.6880				0.3213
Res6		0.5006				0.4296
View1					0.6087	0.5790
View2					0.5597	0.3902
View3					0.8136	0.3161
View4						0.4590
View5					0.7516	0.3854
Collab1			0.6311			0.3253
Collab2			0.6730			0.2672
Collab3			0.4520			0.4308
Collab4			0.5229			0.2875
Collab5			0.8560			0.1571
Collab6			0.8745			0.1571

Struc1	0.6341		0.3624
Struc2	0.8381		0.1246
Struc3	0.7708		0.1428
Struc4	0.4304		0.2496
Struc5	0.5987		0.2504

Cronbach’s alpha was used in order to test the consistency of the retained variables within the same factor. In general, a Cronbach alpha coefficient of 0.7 or higher indicates that the factor is valid. As shown in the table below, the Cronbach calculated for each of the factors was greater than 0.7.

Table 7. Cronbach’s alpha coefficient

Factors	Coefficient
Policy goals and objectives	0.9451
Resources	0.8997
Beliefs and attitudes of implementing personnel	0.8304
Community support	0.9360
Implementation structure	0.9379

4.3 Descriptive statistics

Table 8 presents the mean, standard deviation, and the minimum and maximum response value obtained from the survey. Community support had the highest mean response, followed by implementation structure, and policy. The high mean response may imply that participants generally agree that these factors are present in their school and/or the education system. Specifically, policies provide definition, strategic direction, goals, and objectives of inclusive education, allow curriculum adaptation, provide guidelines on student assessment, define roles and responsibilities, and include monitoring and evaluation procedures. In terms of community support, collaboration exists among teachers, between teachers and guidance counsellors, and between

teachers and parents in the respondent's schools. With regard to implementation structure, officials at the regional, division, and school level were perceived to be supportive of inclusive education. Further, respondents agreed that there is systematic information exchange at different levels of the education system, and knowledge and expertise-sharing is promoted. Various literature has cited that presence of a clear policy, availability of resources, and community involvement contribute to achieving inclusive education.

Table 8. Summary statistics

Variable	Mean	Std. Dev.	Min	Max
Policy	3.781667	0.8521969	1	5
Resources	3.676667	0.9063705	1	5
Beliefs and Attitude	3.54875	0.7768225	1	5
Community support	3.855833	0.8708759	1	5
Implementation Structure	3.84	0.8537237	1	5

Among five factors, beliefs and attitude had the lowest mean. In general, respondents showed a positive view with regard to the effect of inclusive education in socioemotional skills and academic performance of children with and without special needs. However, when asked about whether all children should be taught in the regular classroom, about 30 percent of the respondents disagreed with the statement. Reservations on the inclusion of CSNs in the regular classroom had also been cited in some studies (Chhabra, Srivastava, & Srivastava, 2010; Pappas, Papoutsis, & Drigas, 2018). While the number of respondents with an opposing view seem to be a small figure relative to the ones who support placing all children in regular classes, it is still an area that needs to be addressed to improve implementation. Previous literature had emphasized that the implementers' positive mind-set increases the chances of success and sustaining reforms.

4.4 Histogram

Figure 5 presents the distribution of survey responses for each independent variable used in the study. Graphs show that the distribution is negatively skewed for all of the variables. This implies that the participants tend to respond positively to the questionnaire items.

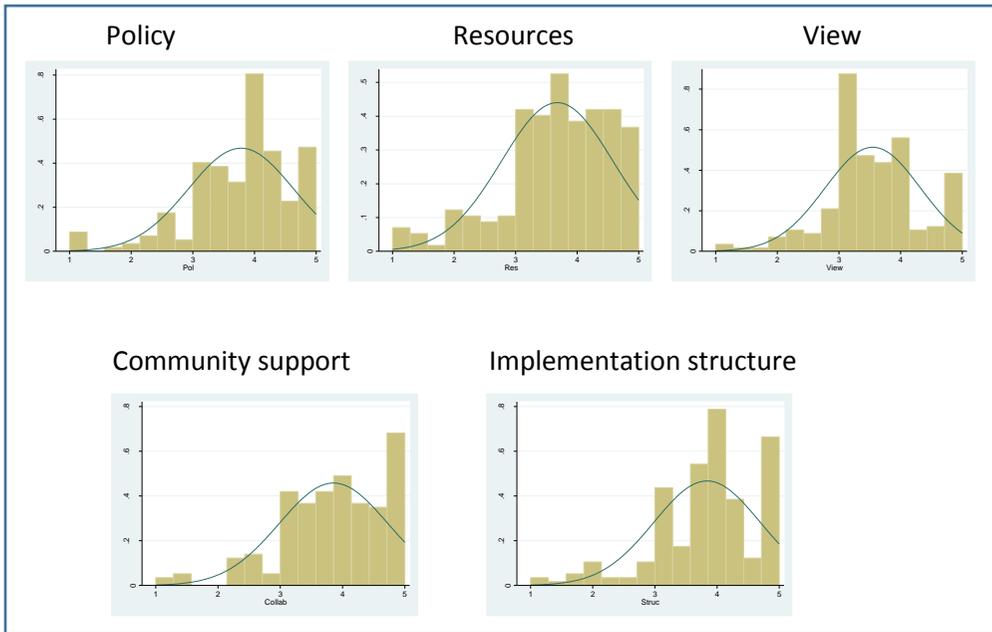


Figure 5. Distribution plot for the mean responses of the independent variables

4.5 Correlation Matrix

Correlation measures the direction and strength of the relationship among multiple variables. Table 9 reflects the Pearson correlation coefficient analysis performed to assess the correlation between the variables under study. Results showed that the independent variables (policy, resources, beliefs, community support, and structure) are positively, correlated with each other.

Table 9. Correlation matrix for the dependent, independent and control variables

	Mainstreamed	PropMIS	Policy Resources	Beliefs	Collab Structure	Poverty SchPop'n	Sex	Age Designation	TaughtCSNs				
Mainstreamed	1.0000												
PropMainstreamed	-0.1918*	1.0000											
Policy	-0.1136	0.0450	1.0000										
Resources	-0.1535*	0.0460	0.7317*	1.0000									
Beliefs	-0.0923	-0.0179	0.5820*	0.5438*	1.0000								
Comm. Support	-0.1442*	0.0716	0.6794*	0.7025*	0.5880*	1.0000							
Structure	-0.0834	0.0340	0.7578*	0.6857*	0.7200*	1.0000							
Poverty incidence	-0.2541*	0.2917*	-0.0695*	-0.0093	-0.0255	-0.0724	1.0000						
School Population	-0.2534*	-0.1467*	0.0063	0.1228	0.1156	0.0363	0.3815*	1.0000					
Sex	0.0361	-0.0974	-0.0133	0.0577	0.0291	0.0605	0.0769	0.0873	1.0000				
Age	-0.0198	0.0457	0.0053	0.0264	-0.0405	0.0018	0.0047	-0.1748*	-0.0357	-0.0580	1.0000		
Designation	0.1117	-0.2085*	-0.1629*	-0.1355	-0.0614	-0.0945	-0.1233	-0.2193*	-0.2709*	-0.0753	0.0079	1.0000	
TaughtCSNs	0.3126*	-0.590*	-0.1518*	0.1549*	-0.1040	-0.1704*	-0.1164	0.1035	0.0004	-0.0085	0.0063	-0.1236	1.0000

Note: *correlation significant at the .05 level

The negative correlation between some of the variables signals the need to examine the current practices or processes and how these are affecting the provision of services to children. For example, in terms of resources, leaders should begin to look at how learning materials and funding are allocated to ensure that all children benefit. Likewise, the quality and extent of parent's involvement in achieving IE may be examined with the aim of defining parents' role and raising their awareness on its benefits.

4.6 Regression Analysis

A multiple linear regression was conducted to determine the effect of the identified factors to the implementation of inclusive education. Mean responses from the survey questionnaire were generated for each of the independent variables. Demographic characteristics and socioeconomic data were included as control variables.

Two measures of the dependent variable were used in the regression analysis. Model 1 shows the regression results with using "number of CSNs mainstreamed" as dependent variable. This model only looked into how many CSNs are attending the regular class without considering the total population in the school.

In Model 2, the proportion of mainstreamed CSNs was generated and used as dependent variable. This model allowed us to compare the number of CSNs in the regular class with the overall population of CSNs in schools. Enrolment data as of July 2019, showed that, on average, only a small percentage (less than 30 percent) of the CSNs are mainstreamed in regular classes.

Table 10. Multiple Regression Results

	Model 1 <DV: number of mainstreamed CSNs>		Model 2 <DV: proportion of mainstreamed CSNs>	
	β	p-value	β	p-value
Independent variables				
Policy	-.025	0.827	-.049	0.653
Resources	-.059	0.574	.033	0.741
Beliefs and attitudes	.011	0.899	-.194	0.026*
Community support	-.043	0.682	.174	0.089***
Implementation structure	.029	0.797	.054	0.623
Control Variables				
Poverty incidence	-.240	0.001*	.454	0.000*
School population	-.144	0.050**	-.395	0.000*
Sex	.071	0.283	.091	0.155
Age	.063	0.336	.099	0.119
Designation	.054	0.433	-.231	0.001*
Taught CSNs	.329	0.000*	.122	0.057**
N	200		200	
Prob > F	0.000		0.000	
R-squared	0.2251		0.2765	

Note: ***significant at $p < 0.10$, **significant at $p < 0.05$, *significant at $p < 0.01$

Results from **Model 1** showed that the independent variables do not have a significant relationship with the implementation of inclusive education. The little influence of national policies and resources was also reflected in Berman's (1976) research on educational innovations. The results, however, contrasts with a number of studies which have shown that policy, resources, beliefs and attitudes, and community support influence implementation of inclusive education (Lipsky & Gartner, 1997; Burstein, et. al, 2004; Stubbs, 2008; Adenyi, Owolabi, & Olojede, 2015; Sharma & Loreman, 2016). This implies that other factors may be influencing the decision to place children in regular classes. Studies have shown that the severity of disability (Scruggs & Matropieri, 1996 as cited by Taylor, 2003; Pappas, Papoutsis, & Drigas, 2018)

and parent's attitude can hinder placement of children in general classrooms (Hayes & Bulat, 2017).

Among the control variables, poverty incidence at the school's locality ($p < .001$), school population ($p < .050$), and experiencing with teaching CSNs ($p < .000$) have a significant relationship with implementation of IE. This is consistent with implementation theories which pointed-out that socioeconomic conditions affect implementation. The finding relating to experience was corroborates with Adenyi, Owolabi, & Olojede's (2015) study which revealed that experience contributes to the success of IE.

The negative relationship of the two variables with IE implementation indicates that as the level of poverty and school population increases, the number of CSNs included in the regular classroom decrease. The significant, negative association between poverty and IE may be attributed to the inability of families to send their children to school because of the cost of education. It may be noted that financial concerns is among the top reasons why children are not in school. Meanwhile, the negative association between school population and IE may imply that schools are unable to fully implement IE because of the large class size in regular schools. Several studies (Stofile, 2008; Chhabra, Srivastava, & Srivastava, 2010; Pappas, Papoutsis, & Drigas, 2018) have revealed that large class sizes can become a barrier to implementing IE.

Model 2 presents the regression results when the proportion of CSNs is used as dependent variable. In the 2nd model, the number of CSNs included in regular classes were compared with the total CSN population in the schools. Determining the proportion provides a general view of the inclusion level in the participating schools, and the factors that influence it.

At 0.05 significance level, a significant relationship can be observed between beliefs and attitude (p value < 0.026) and implementation of IE. This is consistent with the findings of Adeniyi, Owolabi, & Olojede's (2015) where a positive mind-set was observed to contribute to successful IE. The negative relationship ($\beta = -0.194$), however, may imply that while school personnel generally have a positive attitude towards IE, it does not necessarily translate to higher percentage of CSNs included in the regular class. This necessitates the need to further analyze how beliefs and attitudes affect implementation of IE. Scruggs & Matropieri (1996 as cited by Taylor, 2003) and Pappas, Papoutsis, & Drigas (2018) noted that teachers become more hesitant to accept CSNs in the regular classroom as the degree or severity of disability increases.

At 0.10 significance level, community support ($p < 0.089$) had a significant association with inclusive education. This is consistent with researches of Lipsky & Gartner (1997) and Kozleski, et. al's (2015) which underscored the importance of cooperation among and between teachers and families in making schools more inclusive.

As in Model 1, poverty incidence and school population had a significant relationship with IE. The negative relationship between school population and IE (p value < 0.000 , $\beta = -0.395$) implies the need to look into the effect of class sizes to the implementation of IE. Meanwhile, the positive relationship between poverty incidence and implementation of IE (p value < 0.000 , $\beta 0.454$) may imply that once children are already in school, poverty incidence does not prevent schools from including CSNs in the regular classroom.

After controlling for socioeconomic status and demographic profile, the differences in the results of the regression models suggests that placement of CSNs in general education classrooms may be influenced by other factors such

as child characteristics, and the parent's attitude towards IE. Meanwhile, in order for schools to achieve higher levels of inclusion and eventually phase-out its segregated classes, implementing personnel must have a positive view of IE which must be matched with the willingness to accept CSNs in regular classes. Further, collaboration among teachers and with parents may help increase awareness on the benefits of IE and support in its implementation.

4.7 Qualitative Results

The succeeding section presents the responses from the four (4) open-ended questions used in the study. Common responses were grouped into categories, and analyzed based on the five factors identified to influence implementation of inclusive education.

Policy

Policy-related responses can be categorized into four major themes - general policy, curriculum, classroom organization, and monitoring. Three (3) respondents identified the need to provide clear policy and guidelines on inclusive education, and two (2) respondents mentioned that the guidelines and policies must contain clear roles and responsibilities. With regards to curriculum, some respondents noted that there should be a modified curriculum for CSNs (6), an individualized education plan (3), specific or differentiated activities for CSNs (4), and socialization programs (5). In terms of classroom organization, some respondents (4) suggested adjusting the number of students per class (i.e. regular teachers with CSNs should have fewer pupils, 1 CSN for a class of 30), and that there should be an assessment first before placing a CSN in the regular classroom (5). Lastly, a few respondents (3) mentioned for programs and projects to be monitored.

The country's policy relating to inclusive education recognizes that curriculum contextualization is important in addressing the needs of diverse learners. Curriculum modification, then, has to be done at the local or school level to ensure that the learner's ability and community's context are taken into consideration. As such, it is important that teachers acquire the competencies needed for curriculum adaptation. Lipsky & Gartner (1997) noted that issues regarding curricular redesign need to be addressed to ensure successful and sustained implementation.

Large class sizes was perceived as a constraint in implementing inclusive education in some countries (Burstein, 2004; Stofile, 2008; Horne & Timmons, 2009; Pappas, Papoutsis, & Drigas, 2018). In the Philippines, the standard teacher – student ratio is 1:35 for grades 1 to 3, and 1:40 for grades 4 to 12. This, however, is exceeded in some schools in urban regions like Metro Manila.

Resources

When the respondents were asked about the resources they need to improve implementation, they identified physical, human, and financial resources. Fourteen (14) respondents mentioned the need for adequate funding so schools can provide the tools to implement inclusive education.

In terms of physical resources, 44 respondents noted the necessity for better and/or additional facilities and equipment i.e. classrooms, comfort rooms designed for persons with disability, and assistive devices. In addition, 42 respondents stated the need for teaching and learning materials that suit the needs of students such as manipulatives/tactile materials, books in braille, workbooks, and visual aids.

In terms of human resources, 104 respondents identified the need for teacher training. A number of respondents (40) specifically mentioned that regular teachers, particularly those handling CSNs, should be trained on inclusive education and special education. Twenty (20) respondents also stated the necessity of having allied professionals such as psychologists, therapists (i.e. occupational, physical, and speech therapists), and IEP team. Relatedly, a few respondents stated that auxiliary services such as child assessment and therapy should also be provided.

The concerns of teachers with regard to funding, equipment, trained teachers, and assistance of allied professionals are similar with the experiences of other developing countries. This also reinforces the findings of Muega (2016) and Andaya, et. al (2015) in selected Philippine schools where training and materials were noted as necessary resources for IE. Among these four, the necessity of trained teachers was the most prominent in the survey results. Further, about one-third of the respondents specifically pointed-out the need for regular teachers to be trained on handling CSNs and inclusive education. This implies that educators recognize their lack of knowledge and skills in teaching in an inclusive classroom and sees that improved competencies would enable them to better address the needs of CSNs.

Beliefs and attitudes

A few respondents (4) expressed reservations in the implementation of inclusive education. One (1) respondent pointed-out the need to change the perspective of regular teachers and how they treat children with special needs.

Negative views with regard to IE were also observed among teachers in the researches of Chhabra, Srivastava, & Srivastava (2010) and Pappas,

Papoutsi, & Drigas (2018). Such views need to be addressed as teachers' perception can affect the learning environment where children are educated.

Community support

Eight respondents said that there should be coordination between regular and special education teachers. Other respondents mentioned about developing partnership between schools (2), and that the community should also provide support in implementing inclusive education (5).

When respondents were asked what should be the role of parents in inclusive education, several respondents (43) said that parents should support, guide, and assist in the education their children. Nineteen (19) respondents noted that parents should provide support to, cooperate with, and act as partners of the teachers, while thirteen (13) respondents mentioned that parents should support and participate in school activities. A few respondents also stated that parents should be updated about their child's progress (8), monitor (4), and be involved in decisions regarding their child's education (5).

Literature on inclusive education have emphasized the importance of involving families in achieving inclusive education. Respondents noted that parents should extend support to both their children and the teachers. It is critical, then, that parents understand what inclusive education entails and their role in achieving it.

Implementation structure

In terms of implementation structure, three (3) respondents identified the need for support from officials such as those in the executive position and school heads. Another respondent suggested that there should be full coordination among officials down to the teachers.

CHAPTER 5: SUMMARY AND CONCLUSION

This chapter presents the highlights of the results and its implications, limitations of the study, and recommendations for further research.

5.1 Summary of Research Results

This study was conducted to determine the factors affecting the implementation of inclusive education in the Philippines. Five factors were posited to have a positive relationship on implementation - policy, resources, beliefs and attitudes, community support, and implementation structure.

Survey results revealed that respondents generally agree on the presence of guidelines, resources, and support within and outside the school with regard to inclusive education. Beliefs and attitude had the lowest mean response which can be attributed to the relatively higher number of respondents who disagreed that all children should be taught in the regular classroom. Responses to the open-ended questions showed that some aspects in the current system needs to be improved in order to achieve the goal of inclusiveness. Respondents noted the necessity of acquiring knowledge and skills on inclusive education, providing facilities and learning materials, engaging therapists, and partnering with parents in addressing the needs of CSNs.

The two models used in the regression analysis showed that socioeconomic context affects implementation of inclusive education. This is consistent with implementation theories stating that environmental context affects policy implementation, and as such, it is important to ensure program stability regardless of external conditions.

Community support, beliefs and attitudes of implementing personnel, and socioeconomic contexts appeared to be a significant factor in increasing the

proportion of CSNs attending general education classes. Thus, in order to transform into a more inclusive school, where all children are educated in the regular classroom, it is crucial to strengthen collaboration with various stakeholders and address concerns of school personnel with regards to IE.

5.2 Implications of findings

Given that the results of the statistical analysis showed that poverty incidence affect implementation of IE, it is important to continue efforts that improve the economic situation in the locality and develop or enhance programs supporting students from low income families. Likewise, it is crucial to sustain education reforms that facilitate timely provision of basic education inputs such as classrooms and school furniture in order to reduce class sizes in urban areas

The survey results and statistical analysis with regard to beliefs and attitudes of personnel showed that it is important to allay the reservations of some teachers when it comes to implementing IE. To do this, it is necessary to understand why some educators are reluctant to teach CSNs in the regular classroom, and based from these, develop strategies to address their concerns.

Community support appeared to be influencing implementation of IE in the respondent schools. As such, schools need to strengthen existing collaboration mechanisms with the aim of generating more support from the community in terms of developing programs catering to the diverse needs of students, augmenting school resources (i.e. allied services), and advocating the importance of IE. Further, teachers must be provided with sufficient time to plan and work together in order to address the diverse needs of children.

Enrolment data shows that, on average, only a small percentage of CSNs are attending regular classes. Further, a negative relationship between some of the variables may imply that some practices and processes need to be improved in order to improve implementation. As such, a more thorough situation analysis is needed to determine how schools can transform into a more inclusive learning environment where segregated classes are reduced and eventually phased-out.

5.3 Limitations of the study

The research focused on the implementation of inclusive education at the basic education level, specifically the inclusion of children with special needs in public elementary schools. Given the limited time and resources, only 10 regular elementary schools with special education centers in the National Capital Region were included in the study, and the status of implementation at the secondary level was not looked into. Further, the survey locale is a highly urbanized area, and as such, results of the study may not reflect the realities in other schools particularly those in the rural areas. In addition, respondents of the study were limited to school personnel and did not capture the perceptions of students and parents with regard to implementation of IE.

In terms of methodology, the research primarily used survey questionnaires to identify which among the factors influence implementation. Surveys, however, may not be able to capture the total situation, and may be subject to “artificiality” (Babbie, 2013). As such, the use of other methods such as interviews and participant observations may provide cross-validation for the survey results.

5.4 Areas for further research

A comparative analysis involving urban and rural areas, and regular schools with and without special education centers can be conducted to determine the differences on how these variables affect implementation of inclusive education. Further research may incorporate additional factors that could possibly influence implementation i.e. other socioeconomic indicators, parents' belief and attitude, and local government support. It may also include students and parents as research respondents to know their views on IE. In addition, case studies may also be conducted among schools with high levels of inclusion and those with low levels to provide a more in-depth understanding of these factors.

The measure by which implementation of IE was gauged focused mainly on the access component of IE, particularly a CSN's inclusion in the regular class. The quality of learning experience of CSNs or student outcomes was not taken into account, and this would have added a different dimension to the analysis of implementation. It should be remembered that inclusive education is not just about placing students with special needs in regular classes, but is also concerned with the quality of their participation and learning outcomes. As such, future research may look into how IE influence student outcomes for both CSNs and regular students. In addition, other quantitative measures of inclusiveness can also be used to enhance reliability.

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APPENDIX

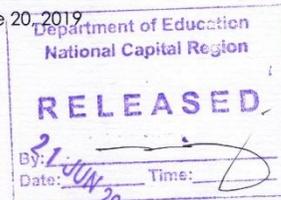
Appendix A. Approval for the conduct of research in selected public schools



Republika ng Pilipinas
(Republic of the Philippines)
KAGAWARAN NG EDUKASYON
(DEPARTMENT OF EDUCATION)
PAMBANSANG PUNONG REHIYON
(NATIONAL CAPITAL REGION)
Daang Misamis, Bago Bantay, Lungsod Quezon
(Misamis St., Bago Bantay, Quezon City)

June 20, 2019

MS. YUKO LISETTE R. DOMINGO
Researcher
Seoul National University
South Korea



Dear Ms. Domingo,

In reference to your request letter RE: CONDUCT OF RESEARCH entitled "**FACTORS AFFECTING THE IMPLEMENTATION OF INCLUSIVE EDUCATION IN THE PHILIPPINES**", such was referred to the Schools Division Superintendents of Manila, Quezon City, Marikina City, Pasig City, Valenzuela City, Makati City, and Pasay City, however, you are advised to observe/comply with the following:

1. No disruption of classes. No interview should be undertaken during class hours.
2. Priority is given to school activities and functions. School heads and teachers shall give priority to their duties and functions over the research.
3. Participation of any student/school personnel is voluntary. They cannot be forced.
4. Derogatory/demeaning/ offensive terms in the research tools will not be allowed.
5. The Region and the Division concerned shall be furnished a hard and soft copies of the study/ copies of the final and signed paper.
6. The result should not be used for other purpose than as stated in the letter and allowed by this Office.

Very truly yours,


WILFREDO E. CABRAL
Director III
Officer-in-Charge
Office of the Regional Director

As stated

Work toward excellence. . . play to win!

Abstract in Korean

필리핀 통합교육 시행에 영향을 미치는

요인

Yuko Lisette Domingo

서울대학교 행정대학원

글로벌행정전공

통합교육(IE)을 향한 국제적인 움직임은 다양한 아동 그룹의 요구에 부응하는 환경을 조성함으로써 이들이 양질의 교육에 접근하도록 보장하기 위한 교육 시스템을 구축하기 위해 도전해 왔다. 본 연구는 필리핀의 통합교육 시행에 영향을 미치는 요인 중에서 특히 특수 아동의 포함 요인을 식별하는 것을 목표로 하였다. 영향을 미치는 요인으로는 관련 정책, 자원, 시행 기관의 신념 및 태도, 지역사회의 지원, 시행 구조 등 총 5가지를 상정하였다.

본 연구에서는 국가수도권지역(NCR)에 특수교육센터를 둔 공립초등학교의 교장과 교사들을 대상으로 기술 조사를 실시했다. 조사 참여자들은 통합교육의 구현과 관련하여 일반적으로 긍정적인 반응을 보였지만, 지식과 기술, 시설과 학습 자료, 보조 서비스 및 부모의 참여 측면에서 개선할 부분이 있다는 점에 유념하고 있었다. 다중회귀분석 결과 일반 교육 교실에 CSN을 배치하는 것은 다른 요인에 의해 영향을 받을 수 있는 반면, 통합교육 수준의 증가는 믿음과 태도, 지역사회 지원과 관련이 있는 것으로 나타났다.

주제어: 정책집행, 통합교육

학번: 2018-25411