MAINSTREAMING LEARNERS WITH SPECIAL NEEDS IN A REGULAR CLASSROOM: A SCOPING REVIEW

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ABSTRACT

This study aims to generate thorough and comprehensive review of the teacher’s perspective and hands-on experience in mainstreaming LSENs in a regular classroom, including teachers’ attitudes and perceptions, challenges encountered, and teaching approach in handling mainstreamed classrooms. A scoping review framework by Arksey and O’Malley’s (2005) systematically analyzed the data of the different articles conducted by various scholars. Through scrupulous and through selection of related studies, 10 articles were included in the review from 6 different countries across the globe. The articles included were conducted from 6 countries and various databases. The study highlighted that: 1) teachers have positive and negative attitudes towards mainstreaming, 2) teachers experienced various challenges in handling a mainstream classroom, and 3) learner-centered approach to learning is used in the classroom. Mainstreaming LSENs in a regular classroom has pros and cons among teachers, regular students, and the LSENs themselves. Hence, a daunting responsibility for the teachers. Nevertheless, it is imperative to support teachers by giving seminars and training, especially to those non-special education majors, to be fully equipped to handle mainstreamed classrooms.

Keywords: mainstreaming, inclusive education, LSEN or learners with special needs, regular classroom

INTRODUCTION

Every individual living in society needs the education to become competent in self-realization, communication, and productivity. Through various programs, these will be made possible to fulfill each individual’s expectations and differences. However, every learner has their learning style and emotional qualities (Acar, 2000). There are people who are born with special needs, while others develop them along the way. Those people need help and assistance to develop themselves in various areas to help them live effectively in society. These people in the education context are referred to as LSENs or Learners with Special Needs. According to Pijil et al. (1997), the method of teaching children with disabilities in regular classrooms becomes a global agenda that is known as educational Inclusion. Thus, various internationally acclaimed organizations and countries have committed to promoting inclusive education (Mitchell, 2005).

For many decades, proponents of inclusive education have sought a paradigm change toward an inclusive education system. LSENs are mainstreamed into regular learning environments alongside regular students. The term ‘mainstream’ in the context of inclusive education refers to teaching LSENs regular classes with the regular students. This implies that regular education and special education classes are merged. It is a worldwide framework for inclusive education that was endorsed during the Special Education international conference in Spain in 1994 (Ainscow, 2016). Kozleski et al. (2011) describe inclusive education as a multifaceted notion that celebrates and appreciates individual differences and diversity. It also highlights the consideration of the socio-political model, social justice, equity concerns, and human rights. The purpose of inclusive education also includes the school process reformation and an emphasis on learners’ right to access quality education. The UNESCO released the “Right to Education for Persons with Disabilities: Towards Inclusion” as one of the significant flagships of the Education for All initiative. The EFA flagship will not be considered successful if learners with special needs will be left behind. Hence, this global initiative provides policies and opportunities for every student have equal access to quality life and education. The UNESCO has emphasized teachers’ preparedness, knowledge delivery, and teaching styles as critical components of an inclusive educational platform (UNESCO, 2015). The goal of inclusive education development is to create a vision and recommendations for systems, processes, and learning practices to make it easier to deliver successful education to all learners with special needs (Hornby, 2019). According to Fuente (2021), inclusive education seeks to maximize LSENs’ potential for holistic development. This objective is dependent on instructors who can achieve Inclusion in the educational system by instilling good values, imparting information, and preparing outstanding pupils to face life’s problems.

LSENs are mainstreamed in a regular classroom in most developing countries because of the lack of support and interventions. In the Philippines, the implementation of mainstreaming in primary and secondary schools is anchored on the Department of Education’s Order No. 72, series of 2009. However, this does not provide a definite process of mainstreaming LSEN in a regular classroom. Thus, it generates various gaps amongst teachers and students in mainstream classrooms, especially in physical education.

Similar to all subject areas, Physical Education faces various challenges and opportunities in considering the Inclusion of LSENs in the class. In the K-12 Curriculum, Physical education aims and envisions to develop holistic learners. The subject centers on the development of various domains (psychomotor, affective, and cognitive learning domains) in play or movement exploration setting and fitness education (Anderson, 1989; Rink, 2009).

In many countries, key factors that cause challenges in a mainstreamed classroom are the lack of resources, inadequate infrastructures and facilities, limited seminars and training for teachers in inclusive education implementation, insufficient support of parents, overpopulated classes, and limited support from the district offices (Donohue & Bornman, 2014). Muega (2019) also found out that insufficient training and seminars for teachers become a major problem in implementing inclusive education, which should begin at the pre-service level of teacher training and education. Undeniably, mainstreaming LSENs in regular classrooms are challenging. Teachers shall be employed in rigorous and high-quality trainings and practices, and shall be provided with enough funds and resources that will prepare them in handling a much diverse environment.
Kargn (2006) highlighted that for mainstreaming to be effective, typically developing children, LSENs, parents, stakeholders, school administrators, and regular classes must all work together to prepare for mainstreaming LSENs and its initiatives. The success of mainstreaming is determined by the degree to which inclusive education students obtain acceptable and desirable levels of inclusive education and ordinary educational services. Furthermore, the effective implementation of such services is dependent on a few additional factors (Krcaali & Batu, 2007).

RESEARCH METHODOLOGY

Research Design

Sucharew (2019) and Gula (2022) stressed that scoping review describes existing studies and different sources of information, which frequently include results from various research designs and methods. It necessitates structured and thorough searches of the studies to identify significant and relevant information, provide reproducible results, and reduce bias from flawed implementation. Arksey & O’Malley discussed five steps to conducting a systematic review: (1) Identify the research question (2) Identify relevant studies (3) Study selection (4) Charting the data (5) Collating, summarizing, and reporting the results.

Identifying Research Questions

Shoket (2014) defines research questions as queries that reveal one’s knowledge and understanding limitations. They identify with either problematic occurrences, happenings that are perplexing in our current accepted concepts, or challenging beliefs, existing concepts that are contested by new theories. According to Merton, Broom, and Cottrell (1959), researchers must substantiate the needs for awareness and other finite resources that research makes: “The social institution of science endures the responsibility that they substantiate the claim by granting upon the researcher the authority to charge that a story gets the topics mentioned of each other as well.

Identifying Relevant Studies

Key search terms were used to identify wide range of related studies (Table 1). In this study, inclusion and exclusion criteria of literatures were used. Designing inclusion and exclusion criteria for research participants is a regular and necessary activity while developing elevated research methods. According to Patino and Ferreira (2018), inclusion criteria are the fundamental features of the target group that the researchers will employ to address the study question. As a result, standard inclusion criteria include socioeconomic, medical, and geographic factors. According to Meline (2006), studies are excluded from the grouped and gathered literatures because they (a) they did not meet the inclusion requirements and criteria, (b) incorporate procedures that are inadequate or confusing, (c) fail to reach a specific quality criterion, or (d) fail to provide enough statistics or data for calculating effect sizes. Google Scholar, ERIC, and Research Gate are three of the most relevant databases used to identify relevant literatures. Before conducting the official database search, an iterative approach of trial searches was carried out to discover which search words would provide the most relevant research. In each case, the search terms were sought in the full text of the study. Search limiters were used to guarantee that the literature was published in English between 2000-2021. (See Table 1).

Table 1. Inclusion and exclusion criteria

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Inclusion</th>
<th>Exclusion</th>
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<tbody>
<tr>
<td>Time period</td>
<td>2000-2021</td>
<td>Studies beyond these dates</td>
</tr>
<tr>
<td>Language</td>
<td>English</td>
<td>Non-English studies</td>
</tr>
<tr>
<td>Type of article / publication</td>
<td>Journal articles, conference papers, doctoral thesis/dissertations</td>
<td>Articles that are not published in journals, not presented in a conference, or not a doctoral thesis/dissertation</td>
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Study Selection

A total of 197 articles were identified through the abovementioned databases search and 26 additional records (grey literature) identified through specific sources, of which 15 duplicates were excluded. The remaining 208 articles were screened for relevance, date, and study scope. 159 articles were identified as irrelevant, leaving 244 articles being categorized as potentially relevant studies. Then, a total of 39 records were excluded based on the type of articles, availability of full-text articles, and population. Overall, 10 articles were identified as relevant studies for the scoping review. Illustrated in Figure 1, study selection utilized the flow diagram of Preferred Reporting of Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement (Liberati et al., 2009).

<table>
<thead>
<tr>
<th>Study Focus</th>
<th>Literature focus</th>
<th>Population and sample</th>
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<tbody>
<tr>
<td>Teachers in the basic education, who serve as the implementor of inclusive education</td>
<td>Articles in which mainstreaming and inclusive education have great emphasis</td>
<td>Teachers who are handling mainstreamed classes.</td>
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<tr>
<td>All other students and educational settings</td>
<td>Articles that focused specifically on LSENs. Articles in which spiral progression approach has a significant bearing or emphasis</td>
<td>Teachers who are not handling special education classes and mainstreamed classes.</td>
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Chartering the Data

Significant information, (author(s), aim of the study, location of study, year of publication, intervention/methods employed, study design, population sample, and outcomes, were extracted (Tables 2).
<table>
<thead>
<tr>
<th>(Study number)</th>
<th>Author details, year &amp; location</th>
<th>Study Design/participants sample</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td>(1) Baguisa &amp; Ang-Manaig, 2019 Philippines</td>
<td>N=176 A survey questionnaire was used. The data was interpreted and evaluated using a Likert conversion scale.</td>
<td>The study found a strong association between and among respondents' knowledge and attitudes about inclusive education. The study has shown the needs for teachers of inclusive education to attend to trainings and seminars. There shall be a collective collaboration from the parents, guidance counselors, nurses, and teachers. The Department of Education district offices shall include trainings for teachers handling children with special needs in their action plan.</td>
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<td>(2) Cooke, 2015 South Africa</td>
<td>N=8 Qualitative approach. A case study technique was used in this investigation. Semi-structured interviews and observations were used in this study as methodologies.</td>
<td>The study has shown various challenges and experiences met by the teachers in handling mainstream classrooms. There was insufficient support from the school’s administration and stakeholders. The study has concluded that the implementation of inclusive education will be successful if implementors are supported with stakeholders’ involvement and commitment.</td>
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<td>(3) Davis &amp; Florian, 2004 USA</td>
<td>A two-phased methodology was used to accomplish the project objectives and answer the research questions. Compilation of scientific literature. Cross-university teams were also formed around these four areas, which we referred to as strands.</td>
<td>The educational requirements of children vary greatly. Thus, there is a growing recognition of the need to shift away from the notion that one model of learning informs and justifies one approach of instruction. The study has synthesized the results on successful teaching methods and strategies in all areas of special education. It also assessed that the four areas of needs are useful to increase teachers’ understanding in educating students with the whole spectrum of LSENs.</td>
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<td>(4) Dukmak, 2012 United Arab Emirates</td>
<td>N=451 Adult Attitude Scale The Checklist of Teachers’ Opinions on the Best Placement for Students with Disabilities was created.</td>
<td>The study showed that teachers handling mainstream classroom have supportive attitudes in mainstreaming. The study also found out that attitude also varies in gender. Male teachers have more positive attitudes towards mainstreaming than females did. Furthermore, the teachers’ age showed no relevance in their attitude towards inclusion, and their years of experience were not correlated. Findings also revealed that teachers have positive perceptions towards mainstreaming LSENs because educational placement for LSENs to be in a regular classroom. In contrary, they became least positive when they perceived educational placement for LSENs to be outside the regular classroom.</td>
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<tr>
<td>(5) Loreman, 2017 USA</td>
<td>Cross-referencing. No population samples. Qualitative type of research through document analysis</td>
<td>Pedagogy for inclusive education is evolving in parallel with our perspectives on diversity, inclusion, and exclusion. Complex as it may appear at times, what stays consistent is a respect for all children's learning and a desire and readiness to better cater to all children's needs via how they learn and educate them. A set of principles for creating and implementing inclusive education pedagogy may be gleaned from the</td>
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academic literature. However, these ideas are best examined through a critical perspective that emphasizes concerns for instructors involved in inclusive education.

<table>
<thead>
<tr>
<th>Source</th>
<th>Methodology</th>
<th>Participants</th>
<th>Findings</th>
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<td>(6) Monsen &amp; Frederickson, 2003 New Zealand</td>
<td>N=63, N=1729</td>
<td>A total of 16 public middle and secondary school in the wider Auckland metropolitan region were approached and requested to participate. The questionnaires for instructors included the ORM scale as well as a section for gathering background information.</td>
<td>The study discovered disparities in instructors’ views toward inclusive education in terms of participation in special education courses. The study also discovered that those who had finished at least one educational topic had more optimistic views. Those who had finished a school-based course were not seen as more desirable than those who had received no special education. Those who had attended award-winning university-based courses, on the other hand, had more favorable sentiments. Other studies have found that increasing quantities of special education training led to large improvements in teacher optimism.</td>
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<td>(7) Muega, 2016 Philippines</td>
<td>N=57</td>
<td>A qualitative–quantitative method of inquiry was employed. A customized survey questionnaire was created.</td>
<td>Participants of this study feel that they have positive perceptions towards inclusion. However, their limited and generic knowledge of handling LSENS affect their attitudes towards inclusion. The few effective inclusive education tools and procedures are only available or accessible to the inclusive private schools similar to the Special Education Process in the United States. Participants have expressed concern about their limited knowledge and training in handling mainstream classes than many inclusive school instructors. Thus, the admittance of teachers lacking in capacity to support high level inclusion of LSEN indicates a lack of inclusive education training.</td>
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<td>(8) Rakholile, 2006 South Africa</td>
<td>N=438</td>
<td>Focus group interviews was used to obtain primary information from the subjects who were selected to participate in the study. All participants in the various focus groups were colleagues who were well acquainted with one another, and participants were selected on the basis of their willingness as well as on the basis of the fact they work in inclusive classroom setting on a daily basis.</td>
<td>Teachers experience difficulty because of a lack of support and encouragement from the Department of Education, society, and other teachers. Teachers need enough time to deal with each child individually, as every learner deserves to get some attention from the teachers. They need time to deal with all learners who need that little attention, especially the disadvantaged ones. Teachers undergo trainings and seminars that will equip them in handling mainstreamed classes. They lack the skill of presenting the content to accommodate both advantaged and disadvantaged children.</td>
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<td>(9) Shaddock, Giorecelli, &amp; Smith, 2007 Australia</td>
<td>Cross-referencing. No population sample. Qualitative type of research through document analysis</td>
<td>The study has found out that practices of inclusive education in secondary schools experienced too many pressures including external exams, curriculum, competition among schools, parents’ choices, schools’ facilities and organizational structure, and the emphasis on the subjects that students. However, LSENs in the mainstreamed classroom included in the primary schools want to attend the same schools as their peers and friends. This study has also shown that teachers who were trained in the same institutions teach differently. Large numbers of mainstream students in the classroom makes the flexibility and response to students’ and teachers’ needs more challenging.</td>
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<td>(10) Williams, 2002 South Africa</td>
<td>N=58</td>
<td>Survey Method</td>
<td>Since its educational strategies were founded on distinctions, which led to the categorizing and</td>
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RESEARCH FINDINGS AND DISCUSSION

This study focuses more on teachers' attitudes and perceptions towards mainstreaming learners with special needs, challenges encountered, and teaching strategies and approaches used in a mainstream classroom. There are 10 literatures used in this study. Three were conducted in South Africa, two from the Philippines and United States of America, and one each in Australia, New Zealand, and the United Arab Emirates.

What are teachers’ attitudes and perceptions towards mainstreaming LSENs (Learners with Special Needs) in a regular classroom?

The implementation of inclusive education, specifically in mainstreaming LSENs in a regular classroom, opened up a deep and broad range of discussion. Research has shown that teachers' attitudes towards mainstreaming and Inclusion vary. Murphy (2014) highlighted that "mainstreaming" and "integration" are used when describing practices in inclusive. Thus, the term "inclusion" sometimes denotes a shift in attitudes and perceptions. According to Manaig and Baguisa (2019), teachers have positive views about mainstreaming LSENs because they feel that LSENs should be given every chance to operate in a regular class. It has also been demonstrated that students advance at their own and acquire positive attitudes towards mainstreaming. Furthermore, Dukman (2013) discovered that teachers have positive perceptions towards mainstreaming LSENs become most positive when they view educational placement for LSENS to be in a regular classroom. On the contrary, teachers' attitudes became the least positive when they viewed educational placement for LSENS to be outside the regular classroom.

Studies have also shown that the environment may affect teachers' attitudes towards mainstreaming. Monsen (2004) revealed that student population becomes an environmental factor affecting teachers' attitudes towards Inclusion. Teachers could be less positive about mainstreaming LSEN when they only have a manageable class size.

There is also a significant finding regarding gender educators and attitudes towards Inclusion. Williams (2002) found out that male educators developed more positive perceptions and attitudes toward mainstreaming. Similar findings can be found in the studies of Dukmak (2013), Bunning (1997), Harasymiw, and Home (1975).

What are the issues and problems encountered by the teachers in mainstreaming LSENs (Learners with Special Needs) in a regular classroom?

Literatures have shown that mainstreaming LSENs in regular classrooms challenged teachers and the schools in various ways. Rakholile (2006) stressed that teachers experience difficulties because they are not thoroughly trained and knowledgeable in how to identify learners with barriers and how to deal with these problems. Hence, teachers need to become knowledgeable in adapting the curriculum and assessment strategies to assist the learners who are experiencing barriers to learning (Muega, 2019). The lack of training among inclusive teachers indicates that they want to be competent to facilitate high-level Inclusion of LSENs. Muega (2019) also concluded that inadequate facilities and resources make it difficult for teachers to address learning barriers. This implies, among other things, the provision of special devices for those with visual and auditory impairments.

Sukhraj (2009) concluded that negative perceptions and attitudes towards inclusive education developed. The department of education has provided a lack of support, including skills training, limited resources and facilities, negative attitudes, stereotyping of differences, inflexible curriculum, inappropriate communication, inadequate support services, educator overload, and parent non-involvement.
Rakholile (2006) highlighted those teachers also find it hard to assess learners who experience barriers to learning. They do not know what to consider or how to assess learners. They do not have access to alternative methods of assessment.

What teaching strategies and approaches were used in teaching mainstreamed classroom?

Teaching strategies and approaches in a mainstream classroom may vary in their impairment and individual needs. Gradel et al. (2016) described a nonlinguistic approach in which teachers explain concepts while students listen and take notes, or students read and evaluate what they have learned from the teacher/s and or peers. Nonlinguistic strategies might include (1) physical models, (2) pictographs or diagrams, (3) kinesthetic representations, (4) graphic organizers, (5) outlining, or (6) mental mapping that helps learners discover and learn in meaningful ways.

Learner-centered strategies are used to allow learners to develop their skills, including social interaction, acquire accessible local environments, and develop dependence. Systematic strategies and approaches are also used in teaching mainstream classrooms, which aims to increase active participation and learning, easily adapt to the environment, and integrate technology (Davis & Florian, 2004). These are the common strategies and approaches in teaching mainstreamed classroom.

Studies have also proven the effectiveness of the peer tutoring method in facilitating inclusive physical education (e.g., Klavina & Block, 2008; Ward & Ayyazo, 2006). Qi & Ha (2012) also found out that the cooperative team approach is good for teaching inclusive physical. Their study demonstrated the usefulness of cooperative learning in the development of social skills in students with and without special needs and the usefulness of various inclusion strategies.

CONCLUSION

Mainstreaming learners with special needs in a regular classroom help promote active and meaningful learning in the classroom. It also promotes inclusivity despite the diversity and individual differences of the students. With its complexity, teachers’ attitudes and perceptions towards mainstreaming vary. They have positive and negative attitudes towards mainstreaming. Teachers have also experienced major challenges in implementing inclusive education, which include lack of seminars and training, resources and facilities, support from the district and or Department of Education. In the conduct of mainstream classes, teachers used varied teaching approaches and methods, including physical models, pictographs or diagrams, kinesthetic representations, graphic organizers, outlining, or mental mapping. They also used learner-centered strategies, cooperative team approach, and systematic strategies to teach mainstream classes, which can be applied to physical education classes.

REFERENCES


Bunning, C. (1997). The attitude and knowledge of primary school teachers toward the hearing-impaired child in Athlone. Cape Town, UCT.


Murphy K. (2014). Teacher Attitudes Toward Inclusion Education Practices. Mount Saint University


