Claremont Colleges Scholarship @ Claremont

CMC Senior Theses

CMC Student Scholarship

2010

The Role of the Socio-Cultural and Developmental Context on Special Education

Amanda Lam Claremont McKenna College

Recommended Citation

Lam, Amanda, "The Role of the Socio-Cultural and Developmental Context on Special Education" (2010). *CMC Senior Theses*. Paper 76. http://scholarship.claremont.edu/cmc_theses/76

 $This \ Open \ Access \ Senior \ Thesis \ is \ brought \ to \ you \ by \ Scholarship (\ Claremont. \ It \ has \ been \ accepted \ for \ inclusion \ in \ this \ collection \ by \ an \ authorized \ administrator. For more \ information, \ please \ contact \ scholarship (\ cuc.claremont.edu.$

The Role of the Socio-Cultural and Developmental Context on Special Education

Amanda Lam

Claremont McKenna College

Acknowledgments

I would like to express my sincere gratitude to Professor Tomoe Kanaya for her guidance and understanding throughout the process of researching and writing this paper. I also want to extend my appreciation to my friends and family for their continued and valuable support.

Table of Contents

Chapter 1: Empowering Students with Disabilities	
Chapter 2: Theoretical Approaches behind Special Education	.12-16
Chapter 3: Inclusive Education	16-20
Chapter 4: Socio-Cultural Context on the Effectiveness of Special Education	.20-38
Chapter 5: Significance of Development Level on the Effectiveness of Special Education	38-48
Chapter 6: Conclusion	.48-50
References	.51-52

Abstract

Existing research on inclusive education deals primarily with the effectiveness of inclusion programs and the theoretical frameworks behind their limitation. However, no extensive research has been conducted that explores the role of the socio-cultural context and the development level in determining the best way in which the educational needs of children with special needs can be met. Recognizing that the effectiveness of different special education services may depend on the socio-cultural context as well as the development level, this literature review seeks to identify the ideal method of treating children with disabilities in developed and developing countries. By assessing the global theoretical approaches behind special education, the tenets of inclusive education, this paper concludes that the needs of special education children in development of the socio-cultural context and the significance of development or the success of inclusive education, this paper concludes that the needs of special education children in development situation children with disabilities in the United States are served most effectively through positive community attitudes and inclusive school cultures.

Keywords: Inclusion, Disability, Special Education, Socio-cultural context, Development

With approximately 10 percent of the world's population having a disability of some sort, it is crucial to identify whether their needs are being fully served by society (Convention on the Rights of Persons with Disabilities, 2006). International treaties and legislation dealing with human rights guarantee the rights of all persons, including those with disabilities, to certain provisions including the right to employment and the right to education. For example, Article 26 of the Universal Declaration of Human Rights highlights the significance of education as a way to fully develop the human personality and promote fundamental freedoms and human rights, stating not only that everyone has the right to education, but also that elementary education should be free and compulsory. The Universal Declaration of Human Rights further emphasizes the value of education under the provision to provide technical and professional education and enable equal access to higher education based on accomplishment, while giving parents the right to decide how their children are educated. Despite the existing legal frameworks that deal with fundamental human rights for disabled populations, however, there are social, cultural, and economic barriers to their implementation. In an overview of international legal frameworks for disability legislation, the United Nations pinpoints the challenges of ensuring the full participation of disabled people in society due to social and cultural norms. Furthermore, considering figures from the United Nations Development Program that identifies 80 percent of disabled people as residing in developing countries, development level may reflect not only how people with disabilities are served in different countries, but also the methods adopted to meet their needs (Convention on the Rights of Persons with Disabilities, 2006).

The considerable number of children with disabilities in the world illustrates the importance of analyzing the effectiveness of special education programs designed to meet their individual needs. In the United States and outlying areas, approximately 6.7 million students

between the ages of 3 to 21 years old were served by special education services from 2005 to 2006, representing a 6 percent growth in the proportion of students in school with special educational needs compared to from 1976 to 1977 (Brandes & Crowson). With around 14 percent of the American population, corresponding to 35 million people, identified as having physical or mental impairments that restricted full participation in day-to-day activities, according to research by Peters (1993) identified by Deng, Poon-McBrayer, and Farnsworth (2001), the way that they are perceived and treated by society reflect larger contextual influences that are embedded in the high development level of the United States. In comparison, disability statistics obtained from the Education Ministry of China reveal that only 260,741 students with disabilities were enrolled in school in 1998 (Deng et al. 2001), accounting for 0.02 percent of China's population at the time (China Population Development and Research Center). The stark contrast between the number of people identified as having disabilities in the United States and China suggests the role of environmental and developmental factors in the identification of children with special needs. Since accepted categories of disabilities in the United States may not exist in China, the considerable difference may be attributed to inconsistent methodologies utilized in both countries due to differences in the definition of disability. As the majority of the population in rural China makes their living through agricultural practices, less obvious disabilities may not be as apparent and identifiable since they may not affect the daily routine of residents. Developmental factors including the inaccessibility of rural areas in China and limitations such as not enough skilled experimenters may also explain the significant variability between the countries (Deng, Poon-McBrayer, & Farnsworth, 2001). With estimates that the frequency of disability is every 40 seconds in China (Stratford & Ng, 2000), it is valuable to

examine how the effectiveness of special education services depends on the interplay between the socio-cultural context and the development level.

Definitions of disability differ across countries and time, indicating how attitudes towards disability and how the disabled are treated are shaped by the socio-economic and cultural context. According to Croft (2010), definitions of disability also depend on the source of the definition and the purpose associated with the designation. There are currently two main models of disability that affect the way that special needs education is addressed. The individual model, also known as the medical model, identifies disability as being centered on the individual, while the social model sees disability as a social construct that reflects broader organizational issues.

In the individual model of disability, the issues associated with limited access to education are attributed to internal problems within the person who is disabled. By defining individuals based on their disability, this model creates distinctions between those who are disabled and those who are not. As a result, the individual and medical model of disability places responsibility on the individual with disabilities to determine correct placement in special education services. That is, instead of having schools meet the needs of those with disabilities, disabled students are expected to integrate into mainstream classrooms or obtain their education from distinct special education services designed specifically for them. As Croft (2010) identifies based on past research by Oliver (1990), "In this 'individual model' of disability, the 'problem' with fitting into society is thus located within an individual disabled person" (p. 4), reflecting beliefs based on this approach that conventional schools do not need to design special services within schools for disabled students. There are significant problems with the individual model of disability. Since the model internalizes disability in individuals, it fails to consider how society plays a role in who is defined as having a disability. In recognition of research conducted by Tomlinson (1982) and Thomas (2004), Croft (2010) identifies that the traditional, individual model does not address how the ability of society to exclude certain groups needs to be challenged and identified. The weight placed on the individual model may also undermine the educational experiences of students as they are seen as having sole responsibility for their academic achievement due to their internal disability. According to research conducted by Lynch and McCall (2009) on teachers in Malawi, this means that teachers may not be held accountable for the academic achievement and inclusion of these students in the classroom, leading to limitations in the amount that these children will learn in the academic setting (Croft, 2010). In a review of inclusive education after the Salamanca World Conference on Special Needs Education, Ainscow and César (2006) point to the inadequacies of the medical or individual model of disability using research by Trent, Artiles and Englert (1998). Here, the authors argue that the prevailing medical approach to defining disability as an individual deficit is dangerous since it hinders progress and does not focus on what schools can do to ensure the success of special needs students (Ainscow and César, 2006).

In contrast to the individual model of disability, the social model accounts for sociological and contextual factors by emphasizing how those in positions of authority may influence the way that disability is identified and dealt with in different locations. Through the view that disability is a social construct, the social model focuses on targeting disability by ensuring access to services. As Croft (2010) points out using research by Albert (2004), the social model sees exclusion from society based not on internal factors, but rather on societal influences. As a result, the social model highlights the necessity of implementing policy that focuses on the elimination of barriers that limit the full societal participation of disabled people (Albert, 2004; Croft, 2010). The stark difference between the individual model of disability and

the social model of disability are thus clearly evident in the goals underlying each model. While the individual and medical approach emphasizes the need for the disabled to normalize into society, the social construct model focuses on how society needs to adapt to meet the needs of disabled people. As such, in order to promote the rights of the people with disabilities, it is important to see which model societies adhere to. Without more emphasis on the underlying goal of the social model, it is likely that the people with disabilities will continue to be ostracized and neglected by the education system. The potential impact of the socio-cultural context and development level on the model of disability that is adopted by different countries may influence the effectiveness of existing special education services for people with disabilities in these places. Therefore, in order to identify how the educational needs of children with disabilities can be best be addressed, the interaction between how disability is perceived and the socio-cultural and developmental context will be examined later.

Special education refers to a specific way in which the needs of the disabled are targeted by society, consistent with the Universal Declaration of Human Rights that promotes education for all. According to Gerber (2005), special education consists of the purposeful organization of schools towards the needs of students with special needs that is characterized by significant effort to work within the structural and organization limitations of the school setting. In other words, special education services within schools are deliberate attempts to serve those with disabilities in light of the underlying constraints that exist in schools. By defining special education as a service catered specifically for people with disabilities, it is possible to identify schools that accept children with disabilities into classrooms but fail to meet their needs and thus are not actually providing special education services. Since special education approaches such as mainstream and inclusion classrooms allow for the integration of students with disabilities in the academic setting, they differ from other practices where special education students merely blend in with other students in the classroom. While mainstream and inclusion classrooms allow for disabled students to be a part of the classroom and recognize their individualized needs and disability, other classroom environments may include children with disabilities but fail to fully serve their needs. The latter classrooms are thus not considered as a part of special education services. Considering that developing countries which do not have enough resources may create the latter classrooms in attempts to provide educational services to special needs children while conserving costs, close analysis on how developing countries work within financial and developmental constraints to provide services for disabled students will reveal their effectiveness. By evaluating how developing and developed countries attempt to serve the needs of disabled students and the effectiveness of existing services, the ideal components of special education services can be identified.

Legislation dealing with the rights of people with disabilities set the foundations for how special education is perceived. The United Nations alludes to the rights of individuals with disabilities as part of the United Nations Millennium Development Goals and underlines the importance of serving people with disabilities in the United Nations Convention on the Rights of Persons with Disabilities. Furthermore, the Salamanca Statement and Framework for Action on Special Needs Education undertaken at the World Conference on Special Needs Education: Access and Quality in Spain during 1994 sets specific provisions for how individuals with special needs are to be served:

Every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning, every child has unique characteristics, interests, abilities and learning needs, education systems should be designed and educational programmes implemented to take into account the wide diversity of these characteristics and needs, those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs, regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and

ultimately the cost-effectiveness of the entire education system. (p. viii-ix) However, despite the immense value of the Salamanca Statement in promoting the inclusion of children with disabilities into the classroom, the statement does not specifically explain why inclusion would be the best means of educating special needs students. The assumption made by the authors of the Salamanca Statement thus fails to consider the potential impact of sociocultural and economic factors on the feasibility and effectiveness of ensuring inclusive education for students. By stating that inclusive education is the ideal, the Salamanca Statement does not recognize different perspectives on the value of education within school. For people with mild learning disabilities living in rural China, for example, the advantages associated with participation in inclusive education such as increased interaction with other students may be undermined by the disadvantages such as the consequences of labeling. Furthermore, the function of education for student with disabilities also needs to be considered. While some may perceive education as an inherent good, others may argue that education is only valuable in terms of what it does for individuals after graduation. For people who believe the latter, the Salamanca Statement does not address how participation in inclusive classrooms will affect the quality of

life of individuals with disabilities after graduation. Although legislations promoting the rights of individuals with disabilities are valuable in terms of bringing attention to the rights of the disabled, it is imperative for them to fully consider the conditions associated with their provisions. While people with disabilities have the same right to be included in academic classrooms as everyone else, inclusion classrooms may not be the most appropriate setting for their needs. For example, some disabled individuals may benefit more from vocational training institutes than traditional school settings. By moving on to analyze the importance of theories to inform practice and consider the theories underlying inclusion education for children with special needs, the importance of the socio-cultural and development framework will be further identified.

Theoretical Approaches Behind Special Education

In addition to assessing the prevalence of disability in countries of different development level, the existing models of disability, and the legislation in place that addresses special needs education, the theories relating to special education must also be considered. Since theories can be utilized to shape the practical implementation of special education initiatives, they play a crucial role in identifying the ideal way in which people with disabilities should be treated by society. Theories can also be used to analyze the effectiveness of existing special education services by comparing the results of these services with their theoretical foundations. As such, this section seeks to provide insight into the theories of learning behind special education.

There is a need to analyze the theoretical foundations behind special education in order to explore how special education services can be maximized to ensure the success of individuals with disabilities. According to Mallory and New (1994), practitioners usually neglect to focus on theories that have the potential to facilitate the success of students while offering program

guidelines. Without considering theories that shed light on the way that children learn and develop, these practitioners may be doing a disservice to the individuals they work with. However, there are some valid reasons for why practitioners may not have focused on the theoretical background of the things that they are dealing with. For one, there is an incongruity in conducting research concerning children with special needs as the researcher needs to balance the need for immediate services and efforts to treat children with disabilities with the necessity of taking the time to evaluate the fundamental theories behind practice. Recognizing that theories take time to develop and analyze, researchers may decide that it is more important to serve the immediate needs of children with disabilities. As a result, the discrepancy between the need for theory and the need for action can undermine the way that children are served. While certain programs may end up meeting the practical needs of students with disabilities, the lack of theorybased reflection may hinder their overall effectiveness and prevent new initiatives from developing that are better able to serve special education students. While some programs have met success even when they were not based on specified theories, other programs have experienced the negative effects due to a lack of theoretical insight (Mallory & New, 1994). For example, Mallory and New (1994) highlight the essential problems with the Milwaukee Project conducted by Howard L. Garber (1988). They point to the assumption made that caregivers and children should be divided for treatment despite current recognition that this distinction violates ethics and is inconsistent with theory (Mallory & New, 1994), thus stressing the need for theory to play a more pronounced role in practical programs. Furthermore, with the majority of action taken in terms of special needs education addressing the needs of students who require immediate attention, more emphasis needs to be placed on programs that serve children with prolonged needs. In this way, theory considerations would be able to inform program

implementation and thus make them more successful. Consistent with this recognition of the importance of theory, learning theories that shape the way that special education is perceived will now be examined in depth.

There are multiple theories that can be applied to the development of special education services for children with disabilities. In fact, multidisplinary theories are able to broaden perspectives on special education and supplement the implementation of successful special education programs. Mallory and New (1994) bring attention to research conducted by Meisels and Shonkoff (1990) that underscores the increasing significance of theories that are multidisplinary and revolve around the context to maximize how children with special needs can be served. Relevant multidisplinary theories include the cognitive-developmental model identified by Mallory and New (1994) as well as the behavioral-ecological model based on research by Vincent, Salisbury, Strain, McCormick and Tessier (1990) (Mallory & New, 1994). The behavioral-ecological model combines operant conditioning with an awareness of the diversity among Americans (Mallory & New, 1994), reflecting how teaching strategies can also account for contextual differences.

The value of the socio-cultural framework in special education is evident in research conducted by Mallory and New (1994) that recognizes the need to move away from individual models of disability to the social model of disability. According to both researchers, approaches to special education require greater emphasis on the context in which practices are applied:

...a new paradigm is needed that embraces our more sophisticated understandings about the ecological context and transactional dimensions of the lives of children with disabilities—and that offers a coherent view about the nature and nurturing of all children's learning. (p. 324). 14

By explaining that conventional models of education have been based on individual distinctions rather than "within an explicit sociocultural framework", Mallory and New (1994) stress the vital need to acknowledge the significance of the socio-cultural context in the development of children with special needs. In reference to the failures of the individual model in meeting the needs of children with special needs, Mallory and New (1994) underscore the necessity of redefining how disability is viewed away from the individual deficit model. Instead, attitudes towards individuals with disabilities need to consider how society can best meet their needs and maximize their participation in society.

Vygotsky's constructivist theory of learning directly relates to the importance of contextual factors in serving children with special needs in the educational setting. In their evaluation of social constructivism and the tenets of inclusion, Mallory and New (1994) explain the features of Vygotsky's theory as consisting of three different components. The first involves the value of the sociocultural context in learning; the second highlights the significance of social activity in the development of individuals and the third deals with the input each active learner has towards his or her self development (Mallory & New, 1994). Vygotsky's model of learning also involves the notions of guided participation and the zone of proximal development. These notions refer to the critical importance of other people in facilitating the development of individuals by aiding them in tasks that are just beyond their level of comprehension and ability. In this way, individuals benefit from social interactions that further their learning. By underlining the importance of interactions between the learner and the environment, Vygotsky's theory of learning recognizes that successful learning depends on the social framework present. Vygotsky's conceptualizations of knowledge are also relevant in identifying the ideal means in which children with disabilities can receive an education. Mallory and New (1994) refer to the

comparison made by Vygotsky between the instrumental and ideological values cultivated through learning, both of which are shaped by the socio-cultural context. Instrumental values are skills that are internally necessary and valuable such as knowing how to hold a writing instrument, whereas ideological values reflect the broader values of society such as the value of knowing how to read by the age of five. Learning cultural tools are also important since they enable individuals with special needs to fully participate and be accepted in society. The determination that cultural tools "vary as a function of cultural norms, beliefs, and patterns of interaction" (Mallory & New, 1994, p. 326) encapsulates how approaches to special education should account for the specific cultural contexts of interactions. Consequently, as research by Weisner and Gallimore (1989) indicates, it would be ideal for all children to be a part a community that promotes their learning process and continuously fosters their growth through long-term support (Mallory & New, 1994). The significance of community attitudes towards special education will be examined in depth in a latter part of this part to identify how negative community attitudes towards the full participation of students with disabilities may limit their potential. As identified by Mallory and New (1994), it is crucial for communities to accept children with special needs and ensure that they are as much a part of the community as anyone else. Since differences in the socio-cultural beliefs between countries may affect the extent in which communities accept children with special needs, the ideal standard for special needs services may vary according to the sociological and developmental background.

Inclusive Education

Inclusive education can refer to two different concepts depending on whether the broad or specific definition is being used. Kugelmass (2006) underlines how inclusion is perceived in the United States compared to the international community. While the United States identifies inclusive education as the provision of special educational services within the general education environment (Choate, 1997; Kochar, West, & Taymans, 2000; Wade, 2000), the international view of inclusive education refers to the broad goal of accepting and supporting the diversity between all learners, including those with disabilities (UNESCO, 1997, 2000). Despite the distinction between the two notions of inclusive education, both share an emphasis on acceptance and addressing the educational needs of students with disabilities. Ainscow and César (2006) point to the shift towards greater inclusion in education evident in attempts to reform policy and practice so that they reflect the principles of inclusion (Freire & Cesar, 2002; Mittler, 2000).

There are various approaches that have been undertaken by governments, educational institutions and non-profit organizations to meet the educational needs of children with disabilities. Segregation is when students with disabilities are separated from their peers and educated in a different setting. Ideally, segregation means that students are learning in educational settings that account for their specific needs and provide appropriate resources they may need such as certain types of technology. Meanwhile, mainstreaming and full inclusion reflect the American model of inclusion in that the educational needs of students are addressed in the general school setting. Within mainstreaming, children with disabilities transition between smaller group classrooms specifically for children with special needs and the general classroom. In comparison, full inclusion speaks to the potential of students to be fully integrated into the classroom, without additional resources for their specific needs. The advantages and disadvantages of each method allow for an evaluation concerning the effectiveness of each program. Additionally, it is important to recognize that the success of each program depends on the context in which it is operating within.

Segregation can be identified as having both positive and negative impacts on a child's academic success and quality of life. While proponents of segregation, including disability groups, may argue that separate education settings actually allow for more specialized resources that in turn benefit the special needs children (Freire & Cesar, 2003; Ainscow and Cesar, 2006), opponents criticize the theoretical foundations underlying segregation. They argue that the practice of segregation reflects the individual-deficit model of disability and thus emphasizes the necessity of separating students with special needs from those who do not due to fundamental differences between the two groups (Ainscow and Cesar, 2006). As a result, mainstreaming may offer an alternative that combines features of both segregation and full inclusion. By enabling children to study in the general education setting for certain parts of the day before they are 'pulled-out' for smaller group sessions with other children who have special education, mainstreaming can be seen as promoting Vygotsky's theories of learning with peers and other learners while ensuring that students with special needs are offered specialized services that serve their learning needs. However, despite the ideal that mainstreaming offers in theory, problems with its application limit its overall effectiveness. For example, Lyndon Johnson's attempts to serve students who were performing poorly in school from low socioeconomic backgrounds through the Title 1 Compensatory Education System that utilized the pull-out method in general education classrooms as part of his War on Poverty were met with negative responses (Zigmond, 1995). In her review of special education services and full inclusion for students with learning disabilities, Zigmond points to research by Allington and McGill-Franzen (1988), Allington, Steutzel, Shake, and Lamarche (1986) and Johnston, Allington, and Afflerbach (1985) that highlights criticism over the inconsistency between what was being taught in pull-out sessions and the instruction in developmental programs. Another argument proposed

by Allington and his fellow researchers (1986) against the pull-out method is the time that is wasted when students' transition between the two classes that could otherwise be used for learning purposes, suggesting that the time loss in transition is not justified by what is being learned in pull-out classrooms (Zigmond, 1995). A third criticism of the pull-out method addresses the negative effects of labeling that are reminiscent of criticism concerning segregation. Since labeling for eligibility to special education services has significant negative consequences as found by Glass and Smith (1977) and Leinhardt, Bickel and Pallay (1982) (Zigmond, 1995), opponents to the pull-out method object that the side-effects of labeling outweigh the benefit associated in pull-out sessions. The immense criticism surrounding the pullout method of serving children with special needs may have led to the development of education practices that foster full integration into the mainstream setting. In these cases, schools undergo significant reform to ensure that the needs of all students are met within accommodating and individualized educational experiences nurtured by the school setting as identified in research by Wang and Birch (1984) and Zigmond and Baker (1990) found by Zigmond (1995). Full inclusion thus means that students are directly integrated into general education classes where they have the opportunity to interact closely with peers. The main criticism of full inclusion is that it does not provide students with special education the services that they need to fully succeed. Ainscow and Cesar (2006) convey that full mainstreaming and inclusion fails to compare to school programs that provide specialized units within schools which are catered specifically for the needs of disabled students. While all three programs have their advantages and disadvantages, identifying the ideal method of serving children with special needs depends on the context in which special needs children are identified. Significant differences in the type of children that are identified as special needs influence how the population can best be served.

As will be targeted later on in this paper, the development level and sociocultural context plays a significant role in this regard. By comparing the state of the special education system across developed countries, focused mainly on the United States, and developing countries, primarily India and China, and reflecting on the ecological and contextual factors that may influence the success of different programs, an ideal model of special education will be identified for developing and developed countries.

Socio-Cultural Context on the Effectiveness of Special Education

Models of special education that are applied vary across different places, reflecting not only primary differences in theories and attitudes concerning people with disabilities but also the disparity in the development level that can affect the implementation of certain special education services, even if their underlying theories are accepted. The goals of special education also differ in developing versus developed countries, bringing attention to challenges of meeting the needs of students in different economic contexts. Research by Bellamy (1999) mentioned by Ainscow and Cesar (2006) reveal that in less economically developed countries, the goal of special needs education and inclusion revolves around targeting the millions of children who do not have access to any form of formal education. In comparison, as researched by Ainscow (2005), and Cesar and Oliveria (2005), more economically developed countries must deal with the failures of existing educational models (Ainscow and Cesar, 2006). While students in wealthier countries have more access to schools, they do not necessarily graduate with substantial qualifications. Furthermore, students that are served in alternate educational settings may be unmotivated to participate in educational services that are not applicable to their lives, leading to incidences of drop-outs, as identified by the aforementioned researchers. The goals and challenges of special education services in developing and developed countries indicate the specific problems that

exist according to the context. Whereas the problem in developing countries stems primarily from a lack of structural support, the issue with developed countries concerning education is a problem of effective inclusion. As a result, while positive socio-cultural attitudes towards children with disabilities needs to be promoted in both developed and developing contexts; the ideal primary institution to serve children with special needs will differ between these countries due to variations in underlying socio-cultural attitudes and beliefs.

The importance of assessing the cultural context when identifying the most effective special education program is evident in research by Iano (2002) recalled by Kugelmass (2006) that emphasizes the value of recognizing socio-cultural and political factors in the development of educational approaches. Since socio-cultural and political factors and educational programs can shape each other, it is crucial to examine how they are interdependent. Deng et al. (2001) point to research conducted by Piao (1998) that reflects the need to use the context in order to inform practice. By revealing the recognition that theories obtained from foreign countries cannot be directly applied to China without accounting for cultural and educational conditions, Piao (1998) illustrates the value of evaluating the cultural context. By examining the impact of socio-cultural values on the implementation of services and legislation in the United States, China, and India, a closer look at how cultural values affect the ideal way of serving students with special educational needs can be obtained.

Legislation in the United States

The theoretical and cultural approaches to special education in the United States are reflected in legislation dealing with the rights of people with disabilities in the country. The P.L. 94-142, now evolved into the Individuals with Disabilities Education Act (Idea, P.L. 101-476), emphasizes the orientation in the United States towards inclusion in general education classrooms. The Individuals with Disabilities Education Act, implemented in 1975, ensures that "all handicapped children have available to them...a free appropriate public education which emphasizes special education and related services designed to meet their unique needs" (P.L. 94-142, p. 1). According to this act, all children with disabilities have the right to free special educational services that meet state standards of education, involve general education schools at all levels of k-12 education, and are consistent with the individualized education program specified for each child. The individualized education program refers to a statement that identifies the current level of educational performance, the yearly goals and objectives to be reached, the precise special educational services to be made available for the student, the degree in which the student participate in the general education setting, the estimated time frame of when services will start and last, and finally, the formation of a suitable framework that performance can be measured against to ensure accountability and assess the progress of the child (P.L. 94-142, p. 1). The emphasis on placing children within the general education setting to meet their special educational needs, to the degree that this is possible, reflects the mainstreaming approach to education characterized by the United States. In this model, participation in the general education classroom is seen as ideal with supplemental services serving the individual needs of children with disabilities. As such, the Individuals with Disabilities Education Act defines disability based on the ability to participate fully in the classroom. Under P.L. 101-476, therefore, children are not identified as having a disability unless it interferes with their educational experience in the general school setting. Students with special needs whose needs are met in general classrooms are therefore exempt from the act and not considered as having a disability within the academic context.

Another provision that has been developed to address the needs of children with special education disabilities is the Least Restrictive Appropriate Placement provision that is also known as the requirement to provide the Least Restrictive Environment. In contrast to the Individuals with Disabilities Act that focuses primarily on services within schools to serve children with disabilities, the LRE act accounts for students who may not fulfill their whole potential in the school setting due to the severity and type of their disability. The act stipulates that children with disabilities should be educated in the same environment alongside children who are nondisabled, to the maximum degree available, and that children should only be pulled out of general education settings if the quality of education they receive even with supplemental services and aids is jeopardized by the nature or severity of the disability ($\S300.11f(a)(2)$). While the Least Restrictive Environment provision does take into account cases in which education in general education environments may not be the most conducive environment for educating children with disabilities, it still assumes that full integration should be the ideal. The basis for this assumption may be rooted in American attitudes towards special education and people with disabilities. Since people in developed countries compared to developing may see education more as a right in itself rather than as a means of obtaining other rights, these populations may place significantly more value on the provision of special educational services within the general education environment. Consistent with Vygotsky's theory of learning that emphasizes the importance of social interactions, proponents of inclusion and mainstreaming may stress the inherent benefits of social interactions over the long-term effects of inclusion on the quality of life experienced by the child with special needs. By highlighting the value of serving children with disabilities within the general school environment as much as possible, legislation in the United States does not account for divergent attitudes towards disability that prefer to focus on

the ability of the disabled not just to integrate into school, but also to integrate into society as a whole. These approaches that are apparent China reflect concerns over the ability of the disabled to make a living for themselves, not just concerns over limited educational services for special needs children that are comparative to general education classrooms. It is clear that legislation in the United States is a reflection of both the socio-cultural context and the developmental context of special needs services.

Legislation in China

Similar to the role of the socio-cultural context and ecological factors in the development of legislation in the United States, legislation in China mirrors broader societal attitudes and approaches towards special education. Historical ways of treating people with disabilities may still influence current attitudes towards people with special needs in China. Deng et al (2001) in their sociocultural evaluation of special education services in China pinpoint research conducted by Cao (1988) and Ye and Piao (1995) where rulers were perceived as having a responsibility to support people with disabilities in accordance with the virtue of helping people who are handicapped underlying Confucian ideology. While rulers were encouraged to support the handicapped, the Confucian emphasis on support over service meant that the creation of specialized services and the implementation of programs catered to people with special needs were significantly limited.

Deng et al (2001) identify research conducted by Yang and Wang (1994) that reveal the impact of the political landscape on the development of special education services in China. Specifically, the provision of special education services was utilized to highlight the superiority of socialism under Mao. During the early 1950s, a provision was introduced that emphasized the importance of creating separate education services catered for different disabilities such as schools for the blind in order to maximize the educational opportunities available for the handicapped. Thirty years later however, China experienced a shift from emphasizing segregated services to promoting inclusion and mainstreaming into general education classrooms, reflecting the influence of the United States on the development of special needs services in the country. By 1986, it was a requirement for schools to accept children with disabilities into their classrooms (Deng et al, 2001). This shift in how the needs of children are addressed in China is still evident to this day through the Learning in Regular Classrooms provision that continues to exist in China. This provision echoes the foundations of inclusive education evident in mainstreaming programs popular in the United States while reflecting influences from the Soviet Union evocative of China's political history. According to Deng and Manset (2002) in research conducted by Deng at al (2001) Learning in Regular Classrooms is based on the premise that students with special needs can receive their education in schools where arrangements can be made with the help of the government to facilitate the interaction of children with and without disabilities. In this model of education, the Learning in Regular Classrooms initiative is separated into three different groups that represent the different types of disabilities that may affect academic accomplishment. In a review of research, Deng et al (2001) communicate the three categories identified by B.L. Xu (1992) where the first category refers to mental retardation, the second to visual impairments, and the third to hearing impairments. Despite the apparent similarity of the Learning in Regular Classrooms program to the Least Restrictive Environment educational inclusion programs in the United States, fundamental differences exist between the two that reflect the cultural context that they are operating in. The theoretical and practical differences between the inclusive education services provided in China and the United States underscore contextual variations between the two countries that are evident in the

dominant socio-cultural attitudes of each place. By comparing how socio-cultural factors may affect the programs adopted by the United States and China, an ideal special education system can be considered for both countries.

The Significance of Individualism and Collectivism

The identification of cross-cultural differences that influence the effectiveness of existing special education services and the ideal programs that should be in place are based on the characteristics of individualism and collectivism explored by Triandis, Botempo and Yillareal (1988). In their study of individualism and collectivism, the researchers identify characteristics that are present in each of these groups that can affect both behavior and attitude. According to Triandis et al (1988), collectivist and individualistic culture differ in terms of how they treat and identify their ingroup and outgroup. In collectivist cultures, the ingroup is usually identified as a singular, stable group that the individual is a part of. As part of this ingroup, individuals reflect goals that are aligned with the goals of the ingroup (Triandis et al, 1988). On the other hand, individuals that are a part of individualistic cultures are usually members of multiple groups. Similarly, their behavior is similar to that within the diverse groups. It should also be considered that participation in ingroups is not stable for individuals in individualistic cultures. Collectivist cultures may also feature more conformity since norms are clearly evident and sanctions may be inflicted on individuals who violate such norms (Triandis et al., 1988). In terms of treatment and attitudes towards members of outgroups, members of collectivist cultures may have low levels of cooperation with members of outgroups compared to ingroups. While this pattern is also evident in individualistic cultures, the differences between how the two groups are treated are less noticeable (Triandis et al, 1988). The dynamics of relationships in individualistic versus collectivistic cultures are also significant. While collectivist cultures emphasize vertical

relationships where an individual is perceived as having power and authority over the other individual, individualistic cultures value horizontal relationships where members of the relationship are perceived as being on the same level. As a result, collectivist cultures place greater emphasis on parent-child relationships while individualistic cultures place emphasis on friend-friend relationships (Triandis et al., 1988). The characteristics of interactions between individualistic and collectivist cultures may directly influence the ideal way in which special education services are applied and implemented.

In China, the culture is strongly centered on traditional virtues of duty and loyalty that reflect Confucian ideals (Deng et al., 2001). As a result of the collectivist culture where ingroup ties were emphasized, individual differences and individuality were overlooked in the country (Deng et al., 2001). The lack of emphasis on individual differences is reflected in how special education was addressed in China before the influence of American ideals and beliefs concerning education for disabled populations. For example, Socialist China was characterized by collectivism and immense loyalty that disregarded individualism (Deng et al., 2001). Consequently, educational practices and services did not account for individual differences between students as attitudes towards educational attainment focused on the equal ability of all students to achieve the same level. Since the cultural orientation of individualistic compared to collectivist countries affect the way that ability is perceived, the educational pedagogies and theories applied are shaped by the socio-cultural context. For example, Confucian beliefs that holds similarities to the features of collectivism stress human perfectibility (Croft, 2010). As a result, theories of ability from this standpoint believe that everyone has same capacity for accomplishment as long as enough effort is exerted (Croft, 2010). This means that the development of educational services for the disabled in China may be limited by perceptions that children with disabilities do not require supplemental services from other children. In comparison, recognition of individual differences is evident in individualistic countries such as the United States where legislation and learning theories consider the individual and set abilities of students with special needs to learn and participate in the classroom. The recognition that students with disabilities may have specific needs that influence their capacity to learn may have thus led and supported the development of special education services in the United States. Consistent with this point, Croft (2010) points to research conducted by Alexander (2000) and Boaler et al. (2005) that imply that the principles of inclusion are based on the perception of ability as being innate and fixed.

To make the influence of cultural context more complex, however, it is also important to consider the ingroup and outgroup dynamics outlined earlier. While ingroup relationships are very strong and interdependent in collectivist cultures, outgroup members may be ostracized or excluded from the community. Therefore, even though collectivist cultures generally promote the equal ability of all students to achieve the same level of academic success, children with obvious and severe disabilities may be held to a different standard as they are identified as members of the outgroup. Research conducted by Mitchell and Desai (2005) identified by Croft (2010) supports the existence of this complex dynamic as they describe Japanese attitudes to differences. They state that while people are generally perceived as having the same aptitude for success, people who are obviously different are not considered under this perception. By emphasizing that expectations for equal success are undermined when students fail to meet these expectations, Mitchell and Desair (2005) highlight how children with special needs may become a part of the outgroup that in turns leads to segregation and placement in separate classes. The incongruity within collectivist cultures where only certain members are accepted into the ingroup

may help explain the existing models of special education for children with disabilities and their effectiveness. Recognizing that children with significant identifiable impairments may be perceived as outsiders, for example, can explain why there is a lack of services catered to children with severe disabilities in certain collectivist countries. Other disabilities, depending on their visibility, may also not be addressed in legislation dealing with special education. The lack of attention placed on meeting the educational needs of children with severe disabilities can be understood both negatively and positively. While a lack of attention may mean that the needs of children with disabilities are being completely ignored so that these children are unable to reach their full potential in society, there are also positive consequences. For example, since these children are able to avoid being labeled by society in the school setting, they may not experience the damaging side-effects to labeling. However, the argument can also be made that labeling is only disproportionately dangerous when children with minor disabilities are labeled. In the cases of children with severe disabilities, people may argue that labeling does not pose as much of a problem since their disability is visible although negative perceptions concerning the abilities of both groups are nonetheless harmful. The dynamics surrounding the impact of cultural factors on the current and ideals models of education for children with disabilities reveal that designation of special needs services needs to be carefully made to balance out the potential positive and negative impacts in light of the consequences of labeling in specific contexts.

The vertical relationships evident in collectivist cultures mirror the hierarchal structures identifiable in China. Deng et al (2001) affirm the focus on hierarchal structures in China as social relationships are often perceived as interactions between individuals who do not share the same social status. Consequently, the prevailing emphasis on hierarchal structures forms a direct contrast to the theories behind mainstreaming and inclusion. Since mainstreaming and inclusion

are founded on beliefs about equality and individual differences, the principles of inclusion may be perceived as being inconsistent with traditionally collectivist cultures (B.Lin & Fan, 1990). This discrepancy between the values underlying inclusion and the values inherent in collectivist cultures may hinder the effectiveness and success of inclusion programs in China. Instead, students with disabilities in China may be better served in educational settings that are segregated from the general education system. As long as their needs are fully met in these environments and community attitudes support the provision of educational services to these students, students with disabilities may benefit more from vocational training institutes that enable the disabled to make a living after graduation and thus participate fully in employment opportunities. The purposes of education behind Learning in Regular Classrooms policies in China and Least Restrictive Environment standards in the United States differ tremendously. While Learning in Regular Classroom aims to address the right of children to be educated by providing access to scholastic opportunities, the Least Restrictive Environment provision focuses on the quality of the education by promoting equal education (Deng et al., 2001). As a result, limitations exist in the application of Learning in Regular Classrooms. Since only three types of students with disabilities are included in the Learning in Regular Classrooms provision (those with mental retardation, visual impairments and hearing impairments), the stipulation does not serve children who may have multiple or more severe disabilities (Deng et al., 2001). By only focusing on these three categories, educational initiatives undertaken by the Chinese government fail to meet the educational needs of students who are not included in the Learning in Regular Classrooms initiative. As a result, children who have severe disabilities are excluded from opportunities to attend school (Deng et al., 2001). Since the Learning in Regular Classrooms provision was adapted from the principles of mainstreaming to recognize the social and

educational framework that exists in China as identified by Deng et al (2001) through the research of Piao (1991 and Zhang (1992), the lack of provisions to provide educational services to children with severe disabilities may be explained by the context. For example, the Chinese government, in formulating the Learning in Regular Classrooms provision, may have recognized that the socio-cultural and economic context of China was not conducive to the implementation of educational programs designed specifically for children with severe disabilities. This decision may be warranted by the fact that children with severe disabilities may not have the capacity to benefit from traditional educational programs. As long as China is serving children with severe disabilities in ways that meet their needs, it can be considered acceptable that schooling programs do not exist for this vulnerable population. In comparison to the Learning in Regular Classrooms, the Least Restrictive Environment directly identifies gradations in which the individual needs of children with disabilities can be addressed. While the United States may also lack conventional schooling programs for children who have severe disabilities, the United States may be perceived as better reaching the needs of special needs children since there is at least a recognition and acceptance of individual differences.

The Role of Specific Cultural Factors on the Effectiveness of Special Education Programs

Beyond differences that may exist between developing and developed countries based on the individualistic compared to the collectivist model, more specific cultural factors also affect conceptualizations of special education services and their effectiveness. With regards to China, Confucian attitudes continue to significantly impact the direction of special education services and the way in which children with disabilities are perceived in the country. As a result, it is worthwhile to identify the principles of Confucian to see how they contributed to existing models of special education in China. The Confucian text Liji lays the foundations for how the disabled should be treated in China by emphasizing that they should be supported, as recognized by Piao (1992) and included in research by Deng et al (2001). However, by highlighting support, as opposed to direct action to meet the needs of the disabled, Confucian beliefs may reflect general acceptance of people with disabilities but not necessarily lead to the provision of specialized services for the population. The hierarchal model of Confucianism, as mentioned before, ties in with the emphasis placed on respect for authority, compliance with rules and acceptance of social standing. In addition, the dominance of authoritative figures that are at the top of the social hierarchy means that policy and program implementation of special education services are shaped by those in positions of power. The lack of parental and community participation in the formation of special education programs may further explain why special education services in China have not been as student-centered. Since parents and other professionals had no input in the implementation of services for the disabled, special education services may not have been focused on providing the optimal setting for meeting the educational needs of children with disabilities (Deng et al., 2001). The way that hierarchal factors in China convene to create certain attitudes and approaches to special education services may suggest why China still fails to meet the needs of students with special needs. The lack of community political will due to the hierarchal structure combined with ingrained cultural beliefs explain why China does not have a culture of acceptance that fully supports and meets the needs of people who have disabilities.

Similarly, Confucian ideals may advocate more for sympathy rather than actively integrating and meeting the needs of students with disabilities in order to enable them to be fully served by educational institutions and services. While sympathy may be perceived as a negative thing in individualistic and western cultures since it ties in which the negative consequences of labeling, the sympathetic approach may actually be a good thing in China. Despite criticism that the lack of widespread acceptance of disability in China hinders the development of inclusive education programs, it is important to analyze whether inclusive education programs such as mainstreaming are even ideal in China. With regards to the sympathy that the Chinese may have towards children with disabilities, sympathetic sentiments may actually mean that the children are provided with the ideal amount and type of social support. Deng et al (2001) highlight that the majority of children with disabilities lived with the support of their family members, the government and the general society. As a result, disability was conceived within a social context and environment that may actually lead to greater acceptance of people who are disabled. Since sympathy does not necessarily correspond to the negative impacts of labeling even though both reflect recognition of a disability, a sympathetic societal environment may be preferable to a classroom environment where children are labeled, at least in developing countries. However, even if the sympathetic model is preferable to labeling young children, it is still crucial to make sure that services exist for the disabled according to their needs. From this analysis, it can be inferred that full acceptance of children with special needs alongside services that cater to their needs offers the ideal environment.

Attitudes towards the education of children with special needs in China may reflect the ecological context. Although children with disabilities may be regarded with sympathy, it is important to point out that they nonetheless do not participate fully in the community. The lack of students in mainstream and inclusion classrooms may be explained by the attitudes and perspectives of parents. For parents who themselves did not receive an education, they may be reluctant towards the concept of education as a whole due to the significant expense and energy that must be applied (Deng et al., 2001). As a result, cultural factors such as attitudes towards education to

shape the way that children with disabilities are served in China and other countries. As research by Deng et al. (2001) recalls concerning research conducted by Q.L. Liu (1992) perceptions on the after-effects of providing educational services to children with disabilities also play a significant role in shaping the ideal way in which special needs students should be treated in developing compared to developed countries. As Q.L Liu (1992) indicates, parents are not willing to send special needs children to school since they recognize that the children will end up staying at home afterwards even after they graduate. In order words, parents feel that the investment that they must make towards the education of their child with special needs is not worth it when children leave the education system not having learned anything that will improve their quality of life or provide them with a way to make a living. Also shown in research by Liu (1992) is the fact that students with disabilities residing in rural areas drop out of general education classrooms since the content of what is being studied does not enable them to receive a better quality of life after graduation. In response to this trend, vocational education has become increasingly stressed as an alternative to conventional models of formal education in the classroom. Since vocational training schools offer children with disabilities a specified form of education that enables them to apply their education to their future, they present a viable means in which the special educational needs of children can be met in light of socio-cultural factors and the development level. As attitudes towards the importance and purpose of education depend on the socio-cultural and economic context, it is clear that the ideal special needs service for a particular place is also dependent on these components.

Following from this analysis of how socio-cultural and developmental factors in China influence the way that educational services towards people with disabilities are addressed and approached, it becomes clear that there is a crucial need to foster increased acceptance of

children with special needs into the society. As noted before, while sympathy may evoke a certain sense of acceptance towards people with special needs, it is necessary for societies to develop a deeper understanding and acceptance of disabled people. Only then will the experiences of special needs children really be maximized. Consistent with this ideal for greater acceptance, the need to promote greater acceptance in China has been recognized by government authorities and educational leaders who prioritize the importance of acceptance in order to promote inclusion as noted by Chen et al (1992) in research found by Deng et al (2001). Chen (1992) points to how the shift towards fostering acceptance signifies considerable changes in how children with special needs are viewed in China, especially in areas that are more rural. Public displays such as banners may be used to bring attention and awareness to disability (Chen, et al., 1992). A consequence of increased attention on people who are disabled may be a greater emphasis on inclusion within schools. The gradual shift towards inclusion in the community may be echoed in greater inclusion within schools as evident in the movement towards local inclusion efforts working with schools (Deng et al., 2001). Deng et al (2001) convey that schools are being developed that will function as resource centers which support inclusion projects, illustrating changes in the way that special education is approached in China alongside the development of the Learning in Regular Classrooms model. Considering that the emphasis on inclusion in school settings may not necessarily be the best model of special education in China and other developing countries, it is useful to examine how cultural attitudes towards the purpose and goals of education impact the education practice that is implemented. While greater focus on inclusive classrooms may be ideal in societies that accept the inherent value in education, the emphasis on inclusion within schools may not be appropriate in other countries.

The Significance of Socio-Cultural Factors in India's Approach to Special Education

The socio-cultural factors that play such a significant role in shaping the educational policies and approaches to special education in China are also evident in India. As a country that has collectivist characteristics, India approaches disabilities through a similar context evident in China. The dominance of the medical model in India means that children with special needs may be identified by their deficit or disabilities that can in turn lead to negative outcomes as assumptions about their ability are made. Consistent with the impact of hierarchal structures stemming from Confucian beliefs is the way that professionals are viewed as having expert knowledge with regards to disability (Croft, 2010). As a result, instead of allowing for the input of people who have disabilities in the development of programs for special needs individuals, India places greater emphasis on the opinions of professionals that in turn shape policy and practice. The consequent result is that the experiences of people with disabilities are undermined as they lack decision-making power over programs that directly affect them (Croft, 2010). Another socio-cultural factor that could potentially impact the effectiveness and ideal means of treating children with disabilities is the value placed on the family. As evident in research outlined earlier, collectivist cultures often stress the importance of ingroup relationships such as the interactions between family members. The collectivist emphasis on family relationships may explain why family members in India are perceived as having the primarily responsibility to serve children who have more severe disabilities (Vakil, Welton & Khanna, 2003). Despite how voluntary organizations have traditionally played a significant role in the provision of special services for children who have more severe disabilities, recent legislation implemented in India reflect shifts in attitudes towards special education that mirror western approaches to special education. The Persons with Disabilities, Equal Opportunities, Protection of Rights and Full Participation Act implemented twelve years ago reflects American ideals and values with regards to special education. The Act highlights that it is the responsibility of the government and local authorities to provide full access to a free education for all children under the age of 18 (Vakil et al., 2003). Similar to the Individuals with Disabilities Education Act in the United States, the Persons with Disabilities Act strives to ensure that the individualized needs of students are met through appropriate learning environments and services (Vakil et al., 2003). Despite the existence of legislation dealing with the treatment of children with special needs, however, it appears that the majority of services are still provided by organizations that are unaffiliated with the government such as non-profit organizations (Vakil et al., 2003). According to research conducted by Vakil et al. (2003), a limited amount of students are being served in general education public schools administered by the Department of Education that promote inclusion. The lack of participation in government instituted educational services within public schools is consistent with the disproportionate among of people being served outside of government services. Although there are 681 special education schools catered to children who have mental deficiencies through the Ministry of Welfare, non-governmental organizations serve a significantly higher number of children with special needs (Vakil et al., 2003). With nongovernmental organizations receiving 90 percent of funds aimed towards serving children with special needs according to research conducted by Misra (2000) recalled by Vakil et al (2003), organizations outside of the government clearly play a crucial role in providing for the education needs of children with disabilities. While legislation referring to services for the disabled in India appears to be rooted in American conceptualizations of special needs education, the practical means in which the needs of children are being met reveal another story. The diminished role that the Indian government plays in serving children with special needs may thus reflect the problem of applying foreign theories into the specific context of India. Without regard to the

socio-cultural and economic context, legislation and policies adopted by the Indian government may have limited success.

Development Level of the Effectiveness of Special Education

While the socio-cultural context affects the success and types of services that are implemented to target the special education needs of children who are disabled, developing countries have an added challenge of ensuring that the needs of children at met in the most appropriate environment. Challenges involved with supporting the role of special education teachers, fostering supportive school environments and cultures, working with limited financial barriers, all reflect ways in which the development level significantly impacts the ability to successfully implement programs. As can be identified through the research, however, it is possible to create successful educational environments in developing countries that have limited resources.

Mallory and New (1994) identify the four main principles of inclusive education to provide insight into how the success of inclusive education can be ensured. The first principle is that "the inclusive classroom functions as a community of learners" (Mallory & New, 1994, p. 329), the second that "social relations are the catalyst for learning in inclusive curriculum" (Mallory & New, 1994, p. 330), third that "content and context are linked through inclusive curriculum and instruction" (Mallory & New, 1994, p. 331) and lastly that "processes for feedback and assessment are authentic and emotionally supportive" (Mallory & New, 1994, p. 333). The ability of inclusive education programs to reflect these four principles may be limited by the challenges identified within the developmental context. Similarly, the limited extent in which the features of successful inclusive reforms presented by Iano (2002) and recalled by Kugelmass (2006) can be produced in developing countries mean that the ideal features of inclusive education need to account for socio-cultural and developmental factors.

The Role of Teachers

The principles of inclusive education determined by Mallory and New (1994) highlight the significance of teachers in fostering the successful development of all their students. Since teachers are able to exert control over the classroom environment, they have the capacity to create inclusive classrooms that support mutual learning through social interactions and promote deep acceptance of children with special needs. By involving students with special needs in classroom activities that allow them to participate to the best extent that they can and ensuring that attitudes towards children with special needs are positive and fully supportive, teachers can greatly impact the success of inclusion and mainstream classrooms, even in light of financial limitations and other developmental factors. However, it may be important to acknowledge that inclusion classrooms which serve disabled students often need to balance out the roles of the general education teacher with the specialized special education teacher, if there is one. In these cases, research by Gerber (1995) highlights the great importance of empowering special education teachers to be in control of ensuring the academic and social success of children with special needs. Research by Gerber (1995) describes schools where general education teachers were perceived as being superior to special education teachers, leading to their diminished participation in the formulation of lesson plans and other crucial decisions made by teachers. In response to this observation, it is crucial for special education teachers to be regarded on the same level as general education teachers so that the educational experiences of children with special needs can be maximized. By working closely with general education teachers to determine how the needs of disabled children can be met within the general education classroom and in smaller sessions outside the main classroom, special education teachers may be able to address concerns over the problems with mainstreaming. As noted before, criticism over mainstreaming concerns the time taken to transition between the main classroom and pull-out classes and the content of what is being studied. As long as the teachers are able to coordinate content material that can be applied successfully in both settings in a way that fosters the effective transition from the main classroom to smaller sessions, effective inclusive classrooms can indeed be created. Similarly, both teachers may also need to rethink how they approach the learning process for special education students. Gerber (1995) recalls in research conducted by Gettinger (1945, 1985) and Gettinger and White (1979) that productive instruction stems from an orientation towards the individual characteristics of learners. In order to teach effectively, therefore, teachers must thus follow cues from learners to determine how much time is spent reaching a specific learning objective. The orientation towards the specific needs of the child needs to be considered by both general education teachers and special education teachers so that they have greater flexibility over the time it may take to cover certain material so that the individual needs of each student are addressed. The increased sensitivity and attention on each child will also help foster increased acceptance by ensuring that children are not neglected in the general education classroom settings. Deng et al (2001) highlight points made by Chen (1993), Deng (1996) and Piao (1991) that convey the importance of monitoring and supporting students with disabilities in the general education classroom to ensure that they are included in the classroom.

To ensure that the ideal strategies and attitudes are adopted by teachers, effective teachertraining schools are needed that design training around the meeting the needs of all students in the school environment. The crucial need for teacher-training in order to promote the educational attainment of students is evident in estimates made by Q.L. Lu (1991) that are referenced by Deng et al (2001. Q.L. Lu (1991) estimated that there would be a need for 388,000 special education teachers in China for the year 2000 when there are only about 3000 graduates from teacher-training programs specializing in special education. Considering his recognition that less than 100 students specialize in special education in university, there is a real problem not only with the training of teachers, but also the general availability of people who are committed to the academic achievement of students with special needs in the school setting. As recognized by Stratford and Ng (2000), China needs to promote the development of services that serve the needs of the disabled. One way of doing this, as proposed by Stratford and Ng (2000), is to ensure the recruitment and efficient training of people in these services and to increase the legitimacy and attractiveness of these careers. However, despite these proposals, it is still valuable to recognize developmental limitations that constrain the extent in which these reform proposals can be implemented. Stratford and Ng (2000) identify these limitations by confirming that improving and creating more training services does require substantial monetary investment that may not be viable for developing countries. Therefore, an ideal means of serving children with disabilities needs to consider not only the socio-cultural context stressed earlier, but also the operating context within the development of the country.

The Significance of Supportive School Cultures

Moving away from the role of teachers in cultivating the development of children with special needs, school culture and attitudes also significantly impact the effectiveness of special education services within schools. In order to successfully serve the needs of students, schools who adopt inclusive education services must fully instill the ideals and theories of inclusion into their school culture. Research by Gerber (1995) describes schools that neglect to emphasize the

need to address learning deficiencies in children and instead exert minimal effort in serving children with special needs. As identified, the success of inclusion depends heavily on how the principles of inclusion are instilled into the underlying theories and practices of each school. In order to create the ideal school environment, it is important for all members of the school to uphold the same conviction towards inclusion. By ensuring that all staff members participate in collective activities that serve to support inclusive educational strategies, schools have the capacity to meet the needs of disabled students (Kugelmass, 2006). Similarly, the attitude of schools towards children with disabilities may significantly affect how other students perceive students who have special needs. Research my McDougall, Dewit, King, Miller, and Killip recalled by Cuskelly (2004) found that students in schools that encouraged learning compared to competitive goals and affirmed positive student-student and student-teacher relationships had more positive attitudes towards their fellow classmates

In a series of case studies researched by Kugelmass (2006), the author examined three different schools located in Europe and the United States and their efforts towards promoting inclusion in the classroom. For the school in the United States, the school served less than 400 students from pre-school to grade 5 where a third of the students were minorities (Kugelmass, 2006). By studying the process in which the school successfully adopted inclusion into its mission and goals from 1994 to 2001, the research illuminates the strategies used by the school to address the needs of special needs children. In comparison, the studies of the European schools were conducted over a shorter period of time as interviews, observations and evaluations of reports and legislation were completed in two months (Kugelmass, 2006). The European studies were conducted in England and Portugal. In the Eastside School located in England there were approximately 400 students in primary school and kindergarten. The socio-economic status

of students was not that high with 70 percent of students' identified as being on free meal plans. Similarly, the school in Portugal served 1200 students attending 5th to 9th grade, including individuals with considerable cognitive and physical disabilities, who came from poor backgrounds and diverse neighborhoods.

Without going into the specific strategies and methods that were applied in each school, it is possible to identify the overarching strategies they shared that led to their success in integrating and including students with special educational needs into the academic setting. Since these schools dealt with vulnerable populations from poor socio-economic backgrounds, similar to the challenges that are encountered in developing countries, their ability o successfully meet the needs of disabled students demonstrates how financial constraints do not necessarily limit the success of inclusive services as long as attitudes are oriented towards the needs of students. According to Kugelmass (2006), each school was completely committed to inclusive education, meaning that there was an institutionalized orientation towards inclusion. As a result, although different methods of applying the principles of inclusion were utilized by each school, they shared a collaborative approach to serving children with special educational needs. Kugelmass emphasizes the cooperative environment fostered in these schools in which there existed a mutual dedication to collaboration alongside a recognition that conflicts may occur. Schools also adopted instructional methodologies that were flexible and responsive to students in terms of their capacities, interests and overarching needs, truly reflecting the student-centered approach to inclusion undertaken by these effective schools.

The strength of the school culture towards inclusion evident in these schools also meant that they were able to deal with legislative limitations that may have otherwise restricted their ability to fully meet the needs of their students. For example, the school in England was able to overcome the challenge of meeting the demands of the Office for Standards in Education, Children's Services and Skills (OFSTED) through leadership that stressed the importance of retaining the attitudes and underlying theories embedded in the school culture. In this particular case, the school responded by working closely with teachers to orient teaching practices and methodologies around the demands of OFSTED while still reflecting the values and and commitment of the school. By adapting teaching strategies in ways that conform to legislation and policies without neglecting the underlying focus on inclusion, schools are thus able to be effective even in the face of opposition. Similarly, the school in the United States responded to increased accountability demands through community engagement. In empowering individuals, such as parents and community members who are invested in school practices, to participate in political action addressing the impact of accountability on the practices of the school, the school was able to maintain a balance between retaining the school's culture of inclusion and meeting accountability provisions (Kugelmass, 2006). The use of political action as a consequent of immense commitment towards inclusion is also evident in the school in Portugal. Here, the school formed a network of schools to create a unified political force that was able to resist challenges to the inclusive environment promoted in schools. The complete dedication of these schools towards inclusion contributed significantly to their effectiveness as: "This kind of cultural cohesion created contexts central to the sustainability of their inclusive cultures. In each case, this required strategic responses to shifts in educational policy perceived by staff as moving away from inclusion. (Kugelmass, 2006, p. 287) The active initiative undertaken by schools to ensure that their focus on inclusion was not undermined signifies how schools and other educational services providing for children with special needs are able to succeed even in developing countries. As long as an attitude of inclusion and acceptance is deeply entrenched in

the educational environment and the community, educational programs are able to target the needs of children with disabilities.

Economic Barriers

Despite the ability of educational cultures that are fully committed to inclusion to make up for limitations that may exist in terms of financial resources, it is important to note that schools and educational services can only do this to the extent that they exist. Without the provision of any services to children who are disabled who would otherwise benefit from special education services, the needs of children with special needs are still not being met. This is the problem that can be identified in developing countries. Due to a lack of monetary resources, families in developing countries may lack access to services for children with disabilities, especially when the government has not yet developed successful models of free education for students with special needs. The issue concerning financial barriers that restrict access to effective educational services for children with disabilities is evident in India where, as mentioned before, the majority of students are still being served by non-governmental organizations (Vakil et al, 2003). In these institutions, families may be required to pay a certain amount of money in order to attain services for their child (Vakil et al, 2003). As a result, poor families and families living far away from where these services are being offered are excluded from the opportunity to provide substantial educational services for their children with special needs. Another point regarding the importance of looking at the economic development of countries to identify the extent in which effective special needs services can be provided is the role that economic growth can have on the development of supportive environments. While the three schools reviewed in research by Kugelmass (2006) demonstrate that it is possible to create ideal learning environments even when dealing with socio-economic constraints, increased

financial support may maximize the ways in which inclusive cultures can be created. As recognized in research by Deng and Manset (2000) recalled by Deng et al (2001) concerning the Learning in Regular Classrooms movement in China, economic growth is perceived as having the ability to enhance the success of the program. While economic factors may maximize the ways in which special needs children are served assuming that an attitude of inclusion exists, a more important variable appears to be the creation of accepting environments fully committed to inclusion. As long as educational services, whether in developing or developed countries, have a strong positive attitude towards children with disabilities and how they educational needs can be met, practices can be perceived as being effective since program administrators will do what it takes to ensure that the environment is student-centered.

Environmental Influences

Another feature that stems from development level is the physical environment where children with special educational needs are being served. The main types of industries and labor that the population is involved in may significantly impact the type of educational service that should be adopted. While white collar jobs may be more common in industrialized and individualistic countries, jobs requiring manual labor may be more common in developing and collectivist cultures. For example, the traditional dominance of the agricultural industry in China, especially in rural areas, still exerts an influence over the ideal means in which special education should be targeted. For individuals who grow up in communities where manual labor and participating in farming practices is the norm, special educational services within schools such as mainstreaming and inclusive classrooms may not meet their needs. In fact, under these circumstances, they may actually produce negative effects in terms of labeling children who may have otherwise been fully accepted into society if they did not have widely visible disabilities. According to research by Deng et al (2001), mild disabilities, such as learning disabilities where individuals may be slower in learning how to read, that do not hinder the ability of individuals to participate in these lifestyles may not be identified or diagnosed. Since these individuals are still able to participate fully in agricultural lifestyles, the lack of diagnosis may not actually be a problem since it does not interfere with the individual's quality of life. Considering the role that agricultural-based communities may have on special education policy and services, training institutes may be the ideal educational service for individuals with minor disabilities who can still participate in the workforce as long as they have some trained skills. Stratford and Ng (2000) recall research conducted by Zhuo (1988) that highlights a vocational training project in Guangzhou, China. Under this program, businesses run by the community integrated 152 people with physical disabilities into the workforce while 22 people with intellectual disabilities were placed in workshops. Within this program, there were supervisors who provided rehabilitation training centered on the home for families who are responsible for individuals with disabilities. In light of the combination of vocational placement alongside community support for people with disabilities, positive outcomes were produced. Research conducted by Lu and Zhou (1991) and Zhuo (1988) recalled by Stratford and Ng (2000) highlight the positive consequences of the program. By leading to more positive attitudes towards people who have special needs and alleviating the financial and psychological pressures of families dealing with people who have financial needs, this community-based program contributed to an increased quality of life for the person with disabilities. The success in this model of community-based rehabilitation suggest that the combination of its components could be used as a way to serve people with disabilities in developing countries who may only need minimal support to be fully integrated into society. By promoting a practical and theoretical commitment towards the acceptance and inclusion of

children with special needs, vocational training combined with inclusive attitudes and orientations towards children with special needs is ideal for children with special needs in China in consideration of the development level and the socio-cultural context. In comparison, developed countries may benefit from mainstream and inclusive classrooms within the educational environments that reflect a strong commitment towards the needs of special needs students.

Conclusion

In response to the lack of research looking at both the socio-cultural context and the development level in determining the suitability of special education services, this paper strived to identify the most appropriate setting for children with special needs in both developed and developing countries. The evaluation of special education policies and practices across countries of different development level opened with a look into the need to empower children with disabilities. The theoretical frameworks for understanding special education were outlined to include the two main models of disability that have shaped attitudes and practices concerning the education of children with special needs. The first is the individual model of disability that defines individuals by their disability and places emphasis on their self-deficiency. Meanwhile, the second is the social model of disability that accounts for the role of social influences and norms in affecting the way that disability is perceived and treated. While both models continue to be reflected in legislation and practices, the fact that international and local legislation have been developed reveals a growing recognition for society to focus on meeting the needs of children with disabilities. While multiple theories can be utilized to inform the development of special education services, this paper focused on theories that accounted for the role of socio-cultural factors to highlight the significance of ecological factors in the success of educational services

for the disabled. Vygotsky's model of learning pinpointed differences between instrumental and ideological values associated with learning that are shaped by the socio-cultural context, implying the impact of ecological factors on both the theories and application of special education services.

Research on the existing educational approaches to special education and general inclusion reveal both advantages and disadvantages associated with segregation, mainstream and inclusion classrooms, and full inclusion environments, further highlighting the importance of looking at contextual factors in identifying the most appropriate placement. An analysis of legislation adopted in the United States, China and India with regards to children with disabilities demonstrates fundamental differences in the attitudes underlying theory and practice. Meanwhile, research on the features and characteristics of individualistic compared to collectivist cultures explain historical and existing ways of addressing the educational needs of children with disabilities while helping to identify how education can best be approached in light of cultural differences. The specific role of Confucius beliefs and parental attitudes in determining the ideal model for educational services in China conveys how educational services need to reflect the context they are operating within.

To identify the ideal ways of meeting the needs of students with disabilities, it is also valuable to account for the level of development since developing countries often lack the financial and organizational structures to support inclusion at all levels. The economic barriers in developing countries mean that a large population of children with special needs may not be diagnosed or receiving adequate services, especially in rural areas. A lack of financial resources can also affect the success of existing educational services by limiting the development of staff training and other initiatives aimed at increasing acceptance and understanding of people with disabilities. The environmental features of developing countries such as the physical landscape and the dominant types of labor further affect the ideal conditions for successful special education services. However, it is crucial to recognize that educational programs for special needs students can still be effective in developing countries. As exemplified in research looking at the role of teacher attitudes and school cultures in promoting inclusion, the commitment of schools and communities towards inclusion is a better indicator of the success of different educational programs. In light of research that suggests the role of the socio-cultural context and the developmental context on the success of special education services, this paper proposes that positive community attitudes on inclusion combined with vocational training institutes are ideal in developing countries whereas positive community attitudes towards inclusion combined with inclusive school cultures work best in developed countries.

Considering that past research on special education has not focused on the significance of socio-cultural and developmental contexts, this paper forms the foundation for further in-depth research on how the effectiveness of special education services may depend on contextual factors. Future research could gather information on attitudes towards special education and people with disabilities across a range of countries that differ both developmentally and culturally. Additionally, while existing research outlines the strategies adopted by schools that were successful in implementing special educational services, more research could be conducted that examines how inclusive attitudes can be cultivated. It is also crucial for research to be developed that identifies the educational needs of students with more severe disabilities and how they can be met by both the private and public sectors. In order to fully serve the needs of all children who have disabilities, it is imperative for researchers to identify what can be done to maximize their quality of life.

References

- Ainscow, M., & César, M. (2006). Inclusive education ten years after Salamanca: Setting the agenda. *European Journal of Psychology of Education*, XXI, 231-238.
- Brandes, J. A., & Crowson, H. M. (2009). Predicting dispositions toward inclusion of students with disabilities: The role of conservative ideology and discomfort with disability. *Social Psychology of Education*, 12(2), 271-289. doi: 10.1007/s11218-008-9077-8
- *China population and development research center*. (n.d.). Retrieved from http://www.cpirc.org.cn/en/totpope.htm
- Convention on the rights of persons with disabilities. (2006). Retrieved from http://www.un.org/disabilities/convention/facts.shtml
- Croft, A. (2010). Including disabled children in learning: Challenges in developing countries. Consortium for Research on Educational Access, Transitions and Equity.
- Cuskelly, M. (2004). Research in the public interest: Working for children with disabilities. International Journal of Disability, Development and Education, 51(3).
- Deng, M., Poon-McBrayer, K. F., & Farnsworth, E. B. (2001). The development of special education in China: A sociocultural review. *Remedial and Special Education*, 22(5), 288-298. doi: 10.1177/074193250102200504
- Education for All Handicapped Children Act of 1975 (1975).
- Gerber, M. (1995). Inclusion at the high-water mark? Some thoughts on Zigmond and Baker's case studies of inclusive educational programs. *The Journal of Special Education*, 29(2), 181-191. doi: 10.1177/002246699502900208
- Kugelmass, J. W. (2006). Sustaining cultures of inclusion: The value and limitation of cultural analyses. *European Journal of Psychology of Education*, XXI, 279-292.

Least Restrictive Environment, § §300.11f(a)(2).

- Mallory, B. L., & New, R. S. (1994). Social constructivist theory and principles of inclusion:
 Challenges for early childhood special education. *The Journal of Special Education*, 28(3), 322-337. doi: 10.1177/002246699402800307
- Stratford, B., & Ng, H. (2000). People with disabilities in China: Changing outlook--new solutions--growing problems. *International Journal of Disability, Development and Education*, 47(1), 7-14. doi: 10.1080/103491200116093

The Salamanca statement and framework for action on special needs education (Rep.). (n.d.).

- Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology*, 54(2), 323-338. doi: 10.1037/0022-3514.54.2.323
- United Nations enable: Overview of international legal frameworks for disability legislation (Rep.). (n.d.).
- Universal declaration of human rights (Rep.). (n.d.).
- Vakil, S., Welton, E., & Khanna, R. (2002). Special education in India: The success of a model program. *Teaching Exceptional Children*, 34, 46-50.
- Zigmond, N. (1995). An exploration of the meaning and practice of special education in the context of full inclusion of students with learning disabilities. *The Journal of Special Education*, 29(2), 109-115. doi: 10.1177/002246699502900201