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An Analysis of The Special Education Services
For Children and Youth in Costa Rica

By

Beatriz Villarreal

A dissertation submitted in partial fulfillment
of requirements for the degree of

Doctor of Education

University of San Diego

1989

Dissertation Committee

Jan Writer, Ph.D., Director

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ABSTRACT

An analysis of Costa Rica special education services was developed with the objective of analyzing its school programs, its university teacher training programs and the quality overall of services provided in the country. Program indicators of quality special education services were delineated with the purpose of comparing the degree to which these indicators were present in the special education programs of Costa Rica. Questionnaires, interviews, observations, and a review of literature were used to obtain a comprehensive description of special education services in Costa Rica. A quality special education school was subsequently designed based on the quality educational programs indicators and the needed educational aspects deemed necessary to serve children and youth who are handicapped in Costa Rica.

Three professional groups from Costa Rica were included in the sample: teacher educators, special education teachers, and special education administrators. Results show specific information about the special education services in the country and the main suggestions from the professionals to improve those services.

Suggestions and recommendations for further research studies were given as well as an outline of the main national educational concerns that require action.

DEDICATION

To my husband, Jorge, my best friend and life companion who dedicated endless hours in the accomplishment of this dissertation and this doctoral program.

To my parents, Rogelio and Betty, who always believed in me and who taught me that when we reach for our dreams, no matter what they may be, we will grow from the reaching, we will learn from the trying, and we will win from the doing.

To my brothers, Rogelio and Sergio, and to my sister Maria Teresa who occupied a very special place in my life and in my heart.

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CHAPTER ONE

Introduction

The field of special education in Latin American countries differs dramatically from that in the United States. These differences are seen in the numbers of children served, quantities of resources allocated to special education, location of special programs, teacher training programs offered by universities, and the quality of services provided.

This study will analyze Costa Rican special education programs, their populations, and their available resources, in a way that will result in an organizational design to establish a school for the handicapped in that country. This organizational design will offer new methodologies and services to professionals in the field and, subsequently, help to improve educational services to students who are handicapped in Costa Rica.

Literature on special education programs in Costa Rica is scarce in the United States; however, global studies about regular educational systems have been developed by foreign professionals interested in this country. Many authors have been interested in Costa

Rica as a nation and for that reason have studied different areas in its culture and in its process as a nation (Hall, 1985; Rosenberg, 1980; Sherman, 1979; and Shawn, 1976). Although these authors gave importance to the education system in general, none emphasized special education programs. It has been noted that the Costa Rican educational system is one of the best in Central America (Rosenberg, 1980). The country has a literacy rate of 93%, which means that almost all school children and adults who live in rural areas know how to read and write (Vargas, 1982). Nothing is reported from these authors about the status of children and adults who are handicapped, however.

A current research on special education programs in Costa Rica is in process by UNICEF. The findings of the study will be published in May, 1989. Other educational journals are published by the Multinational Center for Educational Research (MCER), which was founded in February of 1984. A regular scholarly journal in education (*Revista de Educación*) is also published by the University of Costa Rica (S. Chavarria, personal communication, January, 1989).

This research study will generate information valuable not only for special education professionals in Costa Rica, but also for the development and improvement of special education services in other Latin American countries.

Purpose of the Study

The purpose of this study was to delineate program indicators of quality educational services to children and youth who are handicapped and to determine the degree to which these indicators are present in special education programs in Costa Rica. This data will subsequently be used to design a special education school in Costa Rica that will address the needs of children and youth who are handicapped and will contribute to the development of the special education field in that country.

In an effort to accomplish the purpose of this study, the following six questions will be examined:

Research Question Number 1: What are program indicators (characteristics) of quality educational services to students who are handicapped?

Research Question Number 2: What is the organizational structure of special education administrative services to students in Costa Rica?

Research Question Number 3: What are the characteristics of educational services provided children with handicaps in Costa Rica?

Research Question Number 4. To what extent are the quality program indicators identified in question one present in current special education services offered to students with handicaps in Costa Rica?

Research Question Number 5. What cultural differences

need to be taken into account when comparing educational programs in Costa Rica with those in the United States or other developed countries?

Research Question Number 6. What would be the major components or characteristics of a quality special school in Costa Rica that serves children and youth with handicaps?

Definition of Terms

The following definitions will be used in the study:

Special Education School: A school that enrolls exceptional students who have particular diagnostic labels (e.g., mentally handicapped; visually impaired). Students within such a school typically receive full-time instruction in this placement, and are integrated with their non-handicapped classmates for only a few activities. Many of the students initially served in special schools may subsequently be served at regular school sites (Hallahan and Kauffman, 1982).

Special Education: A specially designed program of instruction which meets the unique needs of an exceptional student. Special materials, teaching techniques, equipment, and/or facilities are required (Hallahan and Kauffman, 1982).

Corporate Culture: Rituals, symbols, and metaphors are used to enable individuals bounded by organizational space

to interact and share common experience (Foster, 1986).

Curriculum: A systematic grouping of activities, content, and materials of instruction offered under school supervision for the purpose of preparing students to learn and live effectively (Kelly and Vergason, 1978).

Ethics: A general conception of right and wrong in the attitudes and actions of individuals and the communities (organizations) of which they are a part (Toffler, 1986 p. 10).

Integration: The placement of students who are handicapped on age-appropriate, regular school sites. It entails systematic and sustained interactions between students who are handicapped and their nonhandicapped peers (Haring and McCormick, 1986 p. 509).

Leadership: An influence relationship among leaders and followers who intend real changes that reflect the purpose mutually held by both leaders and followers (Rost, 1988 p. 17).

Mainstreaming: The full- or part-time placement of students with handicaps into regular education classes. These classes provide for students' special needs through individualized instruction or tutoring. Students who are handicapped may also spend a portion of their day with a resource teacher or a special education teacher (Haring and McCormick, 1986 p. 509).

Normalization: The process of making available to students who are handicapped activities and conditions of

everyday life that approximate or equal those received by students who are nonhandicapped (Haring and McCormick, 1986 p. 510).

Relevance of the Issue to Leadership

Podemski, Price, Smith, and Marsh (1984) felt that the future of the field of special education was in the hands of educational leaders. They argued that a good leader in special education will be interested in the current and future situation. The visionary leader will recognize that special education is only part of an exceptional student's total education, and that there must exist effective partnerships among special educators, other educators, parents, and members of the community that are constructive and consistent with appropriate roles and functions. Taking this into consideration, the proposed study will contribute significantly to the development of the field of special education, not only in Costa Rica, but in all Latin American countries where special education services are so poor. One of the goals of this study is to provide detailed, descriptive information about how special education in Costa Rica is operating and what the main areas of concern are that need attention. The study will, subsequently, provide new perspectives, new method of analysis, and new suggestions to gradually improve this area of education.

A leadership view was included in the study. This

analysis will help increase understanding and appreciation of how critical the study of leadership is not only in special education organizations, but in any private or public organizations. Bennis and Nanus (1985) noted, "Leadership is what gives an organization its vision and its ability to translate that vision into reality" (p. 20). Rost (1988) also suggested that "leadership is a relationship of people who intended real changes, is a paradigm that articulates what transformation is all about" (p. 43).

If the people who want to help persons who are handicapped desire to create a change or transform the special education services in those countries where it is sorely needed, then leadership must be discussed. Without leadership, there is no real intended change that will create an impact on people's lives, attitudes, and behaviors (Rost, 1988). Pfeffer (1983) said that leaders "serve as symbols for representing personal causation of special events." (p. 486). Taking into consideration these ideas about leadership and relating them to special education situation around the world, it can be concluded that it is almost impossible to not address the leadership perspective in this study.

Limitations of the Study

1. The researcher is a Mexican person and for that

reason persons involved in the study (Costa Ricans) found it difficult to express ideas about their country to a foreigner. Even though the researcher explained to those persons that they might obtain something useful with this study, there exists some doubt that all the persons involved in the study were telling all (positive or negative) aspects important to this research.

2. Time was another limitation of the study. The interviews, observations, and gathering the data were developed in a time where many schools and special education programs still were in vacations. However, the researcher could obtain enough data that described at least special education programs in San José, the biggest city of the country.

3. The translation of the questionnaires' answers, oral interviews, and videotapes from English to Spanish was performed by the researcher. Even though the researcher could translate the information into English, there is no 100% assurance of not having any misinterpretation of a word or a phrase.

4. Problems of factuality of response in the questionnaires could demonstrate two main aspects: (a) the respondent does not know the information; and (b) the respondent wants to make information seem favorable to their situation.

5. The number of participants in the sample was small and for that reason might impede the researcher in making

generalizations. However, the respondents are a representative sample of each professional group selected. For example, the main person who is in charge of all the special education services that exist in Costa Rica was included in the group of administrators surveyed.

CHAPTER TWO

REVIEW OF LITERATURE

Special education services in Costa Rica and the United States will be described to develop a comparison between these two nations. Recognizing that special education programs in the United States are considered among the most advanced in the world (Aptekar, 1983), this study will utilize methods and approaches for 'serving exceptional children and youth employed in the United States as a model for services in Costa Rica.

History of Special Education

A historical perspective should be taken into account to better understand the progress of the field of special education in most developed countries. Historically, the entire concept of educating each student to the limits of his or her ability is relatively new. The current use of the term "exceptional" is, itself, a reflection of radical changes in society's view (Kirk and Gallagher, 1979). Kauffman (1981) noted that the historical roots of special

education are found primarily in the early 1800s. He also suggested that most of the vital controversial issues of today have been issues ever since the dawn of special education.

Most of the early providers of special education were European physicians (Swanson and Willis, 1981). Jean Marc Gaspard Itard (1775-1838), a French physician who was an authority on diseases of the ear and on education of students who were deaf, is the person to whom most historians trace the beginning of special education (Kauffman, 1981). In the early years of the nineteenth century, Itard educated a boy of about 12 years of age who had been found living wild in the forests of France. Itard's mentor, Philippe Pinel (1745-1826), who was a pioneer in the humane treatment of persons with behavioral disorders and a prominent French physician, advised him that his efforts would be unsuccessful. Although the boy, Victor, was not "cured" through Itard's systematic instruction, dramatic changes in his behavior were noted (Lane, 1976).

Eduard Seguin (1812-1880) was Itard's student and a follower of his ideas. He was an early initiator of services to students with mental retardation in the United States. He established some of the first residential programs for persons with mental retardation in the mid-1800's. Seguin based his ideas on the principle that persons who were mentally retarded can learn, if taught

through specific sensory-motor exercises (Kirk and Gallagher, 1986).

Among the early Americans concerned with the education of children and youth with handicaps was Samuel Gridley Howe (1801-1876). He was a political and social reformer. Howe was one of the founders of the Perkins School for the Blind in Watertown, Massachusetts, and a teacher of students who were deaf-blind (Swanson & Willis, 1981). His success in teaching Laura Bridgman, who was deaf-blind, greatly influenced the education of Helen Keller. Howe also founded the first school program in the United States for students with mental retardation, in a wing of the Perkins School (Swanson & Willis, 1981).

Thomas Hopkins Gallaudet (1787-1851) was a minister who met and tried to teach a girl who was deaf when he was at the Andover Theological Seminary (Davis and Silverman, 1978). He traveled to Europe to learn about the education of the deaf and, upon his return to United States in 1817, established the first American school for the Deaf in Hartford, Connecticut (now known as the American School for the Deaf) (Goldberg, 1972).

Maria Montessori (1870-1952), the first woman in Italy to receive a medical degree, became known not only as an educator of persons with mental retardation, but as an advocate of Seguin's educational principles (Lane, 1976). She focused attention on the special education needs of preschool children.

While it is true that much of the initial work in the field of special education took place in Europe, there were many Americans who made significant contributions during the past century. Americans stayed informed by traveling to Europe for the purpose of obtaining information about the education of persons with handicaps, and then returning to apply those ideas in the United States (Rosen, Clark, and Kivitz, 1975).

Special education lost its momentum in America during the last part of the nineteenth century, despite the energy, optimism, and achievement of these early leaders (Haring and McCormick, 1986). It wasn't until after World War II that special education in the United States began to overcome the inertia of almost a half century of neglect and regression (Rosen and Clark, 1976).

Early special education services were only offered persons considered to have educational or vocational potential. After 1900, services became more custodial and less educational. The progression of special education services through the years have changed from offering primarily residential or institutionalized care, to providing socially integrated services in not only the schools, but in the community at large (Writer, 1981).

The principle of educating students in the least restrictive environment evolved in the mid-1970's. This principle holds that the first educational placement option to be considered for a student who is handicapped should be

the regular education classroom. More restrictive options should be considered only as necessary, and the student should be returned to the mainstream as soon as possible (Writer, 1981). There are four main concepts that are commonly associated with the principle of least restrictive environmental placements. They are:

1. Normalization: The process of providing persons who are handicapped with activities and experiences as close as possible to those received by persons who are nonhandicapped.

2. Deinstitutionalization: The process of transferring as many exceptional children, youth and adults as possible from the confinement of residential institutions and placing them in community settings.

3. Mainstreaming: The process of placing exceptional students into regular education programs and classes (Meier and Sloan, 1984).

4. Integration: The process of providing positive, sustained interactions between persons who are handicapped and persons who are nonhandicapped.

The development of the field of special education has clearly improved through the years. Thanks to parents, professionals and concerned laymen, this field is progressing toward the provision of the best possible services to children, youth and adults around the world.

Professional and Parent Organizations in United States

Much of the progress of the special education profession over the years has been primarily achieved by collective efforts of professionals and parents (Haring 1986; Morris and Blatt, 1986). The American Association on Mental Retardation (AAMR) was founded by Eduard Seguin in 1886. A group of concerned parents founded the Association for Retarded Citizens (ARC) in 1933. Other organizations were subsequently founded by parents and professionals advocating for people who are handicapped: American Federation of the Blind (AFB); United Cerebral Palsy (UCP); the Association for Children and Adults with Learning Disabilities (ACLD); The American Speech, Language, and Hearing Association (ASHA); the Association for Persons with Severe Handicaps (TASH); and the Council on Children with Behavior Disorders (CCBD), among others (Haring, 1986).

The Council for Exceptional Children (CEC), first called the International Council of Exceptional Children, was founded in 1922 (MacMillan, 1982). CEC and its divisions have become the primary professional organization of special educators and other persons interested in enhancing the lives of individuals who are handicapped. Other professional groups outside of the field of special education, such as the American Orthopsychiatric Association, welcome special educators as members and work toward many of the same goals as CEC (Morris and Blatt,

1986).

Post-World War II Special Education Services in the
United States

Many states expanded their involvement in special education after World War II, providing financial support for special classes and services in local schools for children and youth with physical handicaps, visual impairments, hearing impairments or mild to moderate handicaps. In order for students to be accepted in the majority of schools, in those days, they had to be able to walk, be quiet, and be toilet trained. Children and youth who did not fulfill those requirements, either stayed at home or went to private schools.

A professional emergency occurred in the 1940s and 1950s. Trained special education teachers were in short supply, and the field of special education was not yet firmly established (Cieloha, 1986). After much debate, Congress began to pass limited measures in the late 1950s that were directed toward research and personnel training in the fields of mental retardation and deafness (Abeson and Zettler, 1977). Special education programs had increased dramatically across the United States, by 1973. Programs and resources, however, were not consistent from state to state. Congress passed Public Law (P.L.) 94-142, the Education for All Handicapped Children Act of 1975, to address this inconsistency (United States Department of

Education, 1984). The major components of P.L. 94-142 are:

1. All children and youth between the ages of 3 and 21 with handicaps are to be provided a free and appropriate public education.
2. Nondiscriminatory evaluation is to be conducted with assessment tools and procedures appropriate to the student's cultural and linguistic background.
3. An individualized educational program (I.E.P.) must be written for every student with handicaps who is receiving special education.
4. Children and youth must be educated in the least restrictive environment.
5. Due process must be exercised to ensure the fairness of educational decisions and the accountability of both parents and professionals in making those decisions.
6. Parents of students who are handicapped are to participate in planning for their child's educational program (Certo, Haring, and York, 1984; Haring and McCormick, 1986; Kirk and Gallagher, 1986; MacMillan, 1982; Morris and Blatt, 1986).

Haring and McCormick (1986) noted that, by 1985, the United States government had spent about one billion dollars a year on special education services around the country. In return for that aid, states must show evidence that they are doing their best to help children and youth with handicaps and their parents receive needed services (Morris and Blatt, 1986).

History of Special Education in Latin America

As is true in all cultures, there are limiting and facilitating cultural factors that are particularly relevant in order to understand the advantages and disadvantages of persons who are handicapped in the Latin American culture (Tablada, 1984). The perceptions of Latin Americans toward persons who are handicapped generally emanate, on the other hand, from old, traditionalist views of a person's disability as God's judgment on that individual or family. On the other hand, high degrees of acceptance and integration of people with disabilities into the community exist because of that same belief (Stolow and Clovers, 1981). Aptekar (1983) commented on this phenomena as it occurs in Latin America, when he stated that "by necessity the people's values and consequent attitudes have allowed for the exposure and involvement of the disabled person in public life" (p. 11).

While special education in Latin America is not of the same quantity and quality as in United States, the services presently available throughout the countries tend to more closely follow the American model than the European one (Zaher, 1983). Edelman (1983) noted that a variety of factors that marked the beginning of the most significant advancements in the special education field in Latin America have occurred since the 1960s. They include:

1. The virtual elimination of poliomyelitis and rapid advances in medical technology that dramatically increased

the survival rate of high risk infants and the resultant decrease in the number of children of normal learning ability (post-polio) and the increase in the number of children with severe and multiple disabilities needing special education.

2. The need for teachers with more specialized knowledge and skills to teach them.

3. A move toward greater professionalization of special education teachers to serve the more diverse special education population (preparatory curricula, specialized degrees, professional associations).

4. Continuing pressure from parents, advocacy groups, and the emerging professions for more universal and comprehensive services.

5. Advances in all areas of knowledge related to special education (Edelman, 1983, pp. 15-25).

Basic Facts About Costa Rica

Costa Rica is a small country with approximately 2.7 million people, located in Central America between Nicaragua and Panama. Although its educational system is very successful compared to other Latin American countries, it has serious problems that require action.

The special education field in Costa Rica began in 1939 with the establishment of the first special education school, "Centro Nacional de Enseñanza Especial Fernando Centeno Guell". Thanks to this school, many professionals

worked together in the expansion of special education services around the country. In 1968 the Special Education Department (Asesoría y Supervisión de Educación Especial) was opened in the Ministry of Public Education (Ministry of Education, 1987).

In 1986, 19 special education schools were developed and more than 200 regular schools had integral special education classes (Ministry of Education, 1987). There currently exist more than 400 regular schools that integrate students with handicaps and 15 special education schools that serve the needs of the exceptional children (F. Nieto, personal communication, January, 1989).

The Costa Rican constitution declared the government responsible for free and compulsory education as early as 1869, but the institutionalization of the school system did not really begin until the 1880s (Edelman, 1983). There were improvements in organization and growth in the numbers of young people educated in the first four decades of the twentieth century, but real increases in the number of schools, teachers, and pupils did not take place until after World War II (Smith, 1983). The notion of educating a diverse population for a changing society and economy did not become significant until the 1960s. Even as some of the goals of education have been changing, the emphasis that Costa Ricans at all levels give to education has persisted. Political leaders and others point to the significant proportion of the budget expended on education (nearly one-

fourth in early 1980s). Costa Rica's literacy rate was estimated in 1973 at a little less than 89% for those over 10 years of age and at more than 90% for the same population in the early 1980s (Shierley, 1982).

Specialized preservice training for special education teachers was initiated in 1974. The first master's degree in special education was offered by the University of Costa Rica in 1983 (Costa Rica Ministry of Education, 1982).

The field of special education in Costa Rica is progressing rapidly. The University of Costa Rica, for example, has offered degrees in special education since 1973. There are special education policies developed by the Ministry of Education and Special Education department and with the collaboration of professors from the University of Costa Rica. These policies were designed in 1987 to protect the rights of persons who are handicapped and to improve the special education services of the country (Ministry of Public Education, 1987).

Special Education teachers, administrators, and other support personnel are trained in the University of Costa Rica and in the National University of Costa Rica. These universities offer complete training in all areas of special education.

In comparison to other Latin American countries, Costa Rica has indeed accomplished much in education (Araya, 1985). However, when its educational system and its

relationship to the socioeconomic, political, and cultural setting are studied, some serious problems that demand action become apparent. Although at the conceptual level there is a good curricular foundation from preschool through high school, it suffers from rigid uniformity. According to Phyllis (1982) there are major curricular reforms that are needed in Costa Rica, including:

1. Diversification
2. Location
3. Integration
4. Flexibility

The director of special education programs in Costa Rica reported that they are in the stage of changing the educational services of students who are handicapped to the integration and normalization of all the students who require special education.

Textbooks also constitute a major problem at all levels of the educational system. All students must purchase their own books. Support services such as supervision, guidance and counseling, educational testing, physical therapy, occupational therapy, speech therapy, as well as other special education services and technical assistance, are extremely needed (Schooley, 1986). These problems are due, in part, to a lack financial support, insufficient trained personnel, and organizational problems between different special education services offered in the country (Ministry of Education, 1987). The majority of

schools nowadays are offering free special education programs for persons who are handicapped. Zaher, (1983) also observed that existing schools lack adequate resources and materials (e.g., books; duplicating materials; notebooks; audiovisual equipment; libraries; gymnasium; workshops; etc.).

About 90% of Costa Rica's education funds are spent on salaries. The management of education is heavily politicized. Under Costa Rican law, the country's president changes every four years. Consequently, all the high and medium level officials change every four years. This makes it impossible to plan, execute, and evaluate consistency within a span of four years. A lack of short- and long-term educational information results. Educational data is also limited and extremely difficult to gather (Zaher, 1983).

Current Special Education Services in the United States

The comparatively advanced and well developed special education system in the United States is a good model for other countries to learn from. It can serve as an example for other nations to follow in the provision of quality educational services to their exceptional populations (Cieloha, 1986).

Team Approaches to Service Delivery

There are three professional team approaches most frequently utilized to serve exceptional students (Haring

& McCormick 1986; Kauffman 1981; Kirk and Gallagher 1986; Writer 1981). They are:

1. Multidisciplinary team: It is the oldest version of professional cooperation in serving students who are handicapped. It is based on the medical model of intervention. Students are seen separately (isolated therapy) by various professionals (e.g., the speech therapist will see the student in his or her office), and the final results or recommendations are sent to the special education teacher who is responsible for implementation (Haring and McCormick, 1986; Hobbs, 1975; Vitello and Soskin, 1985, Willis, 1981).

2. Interdisciplinary team: Students are seen separately by professionals, as in the multidisciplinary model. The team meets to discuss the results of their findings and to offer recommendations to the teacher. Many of these recommendations, however, are not realistic to the student's educational development, because they do not take into consideration his or her natural learning environments (e.g., they evolve from assessments artificial environments by persons who are typically unfamiliar with the student)(Haring and McCormick, 1986).

3. Transdisciplinary team: This approach involves all disciplines working cooperatively in the design of educational programs, with assessment and implementation carried out by the one or two team members most familiar with the student (e.g., teacher, parents). This approach

requires that team members share and exchange information and skills (role release) across traditional disciplinary lines. Both assessment and program implementation are conducted in natural school, home and community environments (integrated therapy). Team members who do not participate in the actual assessment and implementation provide consultative back-up to those who do (Writer, 1981). Haring and Billingsley (1984), noted that the transdisciplinary approach is the most recommended, since the instruction and training develops functional skills within practical activities across the natural environments in which the activities usually occur.

Educational Assessment and Program Evaluation

The educational assessment of exceptional children and youth typically focuses on: self-help skills, gross and fine motor skills, social skills, perceptual abilities, communication skills, and cognitive development (including academic skills). All areas play an important role in promoting the student's independence (Haring and McCormick, 1986; Gerhardstein, 1980; MacMillan, 1982; Writer, 1981).

Educational assessment procedures for students with mild to moderate handicaps typically include:

1. Standardized tests of academic abilities.
2. Tests of adaptive behavior that evaluate the degree to which individuals meet the standards of personal

independence and social responsibility expected for their age and cultural group.

3. Teacher perceptions (checklists, or teacher-developed informal tests).

4. Tests of written or spoken language.

5. Parent interviews.

According to Writer (1988 p. 3), characteristics of quality educational assessments for students who are severely handicapped include:

1. They are conducted in the natural environments (home, school, and community) and at the natural times in which the target behavior typically occurs.

2. They are conducted by the persons who are most thoroughly familiar with the student's typical, spontaneous behavior (e.g., teachers, parents, aides, and therapists).

3. They focus on the student's typical, spontaneous behavior over time as opposed to artificially elicited behavior occurring in a single assessment session.

4. They employ real-life materials as opposed to artificial ones. Familiar materials will evoke natural responses; whereas, artificial materials that the student is unfamiliar with (e.g., materials from a test kit) will evoke artificial responses.

5. They provide a means for evaluating the student's performance and the effectiveness of the intervention program.

Educational assessment procedures for students with

severe handicaps typically include:

1. Formal and informal tests of basic skills (e.g., motor skills, social skills, communication abilities) and functional living skills (e.g., domestic skills, leisure skills, vocational skills).
2. Tests of adaptive behavior.
3. Ecological inventories of the skills required for successful participation in natural environments and the student's ability to perform them.
4. Parent interviews.
5. Systematic observations and systematic documentation of the student's performance.
6. Teacher perceptions.

Writer (1988) noted ten critical areas of concern in educational assessments for student with severe handicaps:

1. Fine and gross motor abilities.
2. Oral and non-oral communication skills.
3. Perceptual motor skills (vision, hearing, and touching).
4. Social interactional skills.
5. Cognitive development including functional academics.
6. Self-help skills (e.g., eating, dressing, toileting, grooming, and personal hygiene).
7. Domestic skills.
8. Recreation and leisure skills.
9. Community functioning.

10. Vocational skills.

Many students will require additional assessment by specialists in order for educators to develop an effective educational programs for them. Quality educational assessment results in quality educational programs. The educational assessment data in categorical areas of need should be applied in the development of priority, functional activities. All skills taught a student should be relevant not only to him or her, but also to his present and future life (Writer, 1988).

Among the most significant aspects of Public Law 94-142 are the mandates related to the assessment of students who are handicapped (Writer, 1988, p. 5). They include the following:

1. Tests and procedures must be provided and administered in the student's native language or primary communication mode (speech, manual communication, natural gestures, photograph communication systems, or other modes that student employs).

2. Tests and procedures must have been validated for the specific purpose for which they are used.

3. Tests and procedures used must include those tailored to assess specific areas of educational need and not merely those which are designed to provide a single, general intelligence quotient.

4. Tests and procedures used must be selected and administered so as best to ensure that when a test is

administered to a student with impaired sensory, manual or speaking skills, the test results accurately reflect the student's aptitude or achievement level, rather than reflecting the student's impaired sensory, manual or speaking skills.

5. Tests and procedures must be administered by trained personnel in conformance with the instructions provided by their producer.

6. No single assessment procedure can be used as the sole criterion for determining an appropriate educational program for a student. A variety of assessment procedures must be used to determine the critical areas of concern that are to be addressed in a given student's educational program. Programs must be individualized to meet the individual wants, needs, interests and abilities of the students they are designed for.

Individualized Educational Program Planning

The individualized educational program (I.E.P.) planning team meets, following educational assessment of the student. The I.E.P. team must include a minimum of the following members: the student's parents; the student's classroom teacher; a representative of the school or agency, other than the student's teacher; and the student, when appropriate. The team analyzes the assessment data and develops an I.E.P. that includes long-term goals and short term objectives that will promote the functional independence of the student (Writer, 1988). As Murray

(1980) stated:

The relationship between assessment and program implementation is not one that results from the perfunctory completion of ten easy rules. It is the result of a delicately designed, child centered, interpersonal, and professional process requiring openness, realism, long-term planning, and coordination between the many persons who will be involved.

(p. 24)

Service Delivery Models

A variety of service delivery models are employed with students who are handicapped, ranging from full-time placement in a regular education classroom to placement in a residential school or hospital. The least restrictive placement for a given student is based on a combination of factors, including his or her priority educational needs, behavioral traits and health status. The placement concerns that parents have for their child should be a primary consideration in the decision making process.

The majority of students with mild to moderate handicaps are placed in regular classrooms. Some students may also receive services from a special education teacher or from support personnel. These professionals assist the students with the adaptation of materials and procedures to successfully achieve I.E.P. goals and objectives (Myers and Hammill, 1982).

The majority of students with severe handicaps are placed in self-contained classrooms on chronologically age-appropriate regular school sites. Some students may also be mainstreamed for academic and/or nonacademic subjects. Students with extreme behavioral disorders or chronic health problems may require short-term placement at a special school, but should be returned to the regular school site, as soon as possible. Student's who need support services (e.g., communication therapy; physical therapy; occupational therapy) should receive those services in their classroom, as opposed to a more artificial setting.

Students with sensory or orthopedic handicaps typically are mainstreamed into regular classrooms. Placement in self-contained classrooms may be required by some students during preschool and early elementary school, in order to receive intensive instruction in specialized areas (e.g., auditory training; total communication; orientation and mobility; Braille; activities of daily living). These students usually are mainstreamed part-time during their early elementary school years, then full-time during their later elementary school years. Students with sensory or orthopedic handicaps frequently require the assistance of itinerant or consulting specialists (e.g., an orientation and mobility instructor; a physical therapist; a sign language interpreter; an itinerant teacher of students who are visually impaired).

Teacher Preparation

Students with handicaps have the right to obtain the best specially trained teachers and support services available (Sontag, Certo, and Button, 1979). Only teachers and support staff with the proper training should be hired to teach these students (Bricker and Filler, 1985). Special education teachers should receive training in the following areas (Broader, Snell, and Wildonger, 1988; Falvey, 1986; Haring and McCormick, 1986; Sailor, Wilcox, and Brown, 1980; Sailor and Guess, 1983; Stainback and Stainback, 1985; and Writer, 1981):

1. Assessment: Assessments must be functional, chronologically age-appropriate, and reflect transitions. Functional assessment means the development of specific goals and objectives that describe those skills that will help the student to participate in a wide variety of integrated community environments.

2. Curriculum: Chronologically age-appropriate curricula and activities are necessary to help students who are handicapped to perform and interact with their peers who are nonhandicapped in a variety of environments. Special education teachers should utilize and design assessments and curricula that are based upon the individual wants, needs, preferences, and culture of each student. Curricular activities should be based on natural environments and natural materials and reflect the student's needs with regard to transitions (preparing the

student for the expectations, norms, and rules of subsequent environments).

3. Instructional methods: Instructional procedures must be based upon the student's performance and his or her needs for specific instructional techniques. These techniques must facilitate learning and increase each student's level of independence.

4. Instructional personnel and resources: Special education teachers should have knowledge of how to work as a member of a transdisciplinary team that includes parents, administrators, paraprofessionals and support personnel (e.g., speech pathologists; physical therapists; occupational therapists; psychologists; social workers; orientation and mobility specialists; adaptive physical education specialists; physicians; nurses). Teachers should include parents, siblings, and significant others in the development of the educational program for each student. Their perspectives and input are essential to the student's educational progress.

5. Ecological inventories and strategies: Special education teachers should be able to conduct ecological inventories and employ functional educational strategies. They should divide the curricula into four main domains: 1) domestic; 2) vocational; 3) recreation and leisure; and 4) community functioning. Teachers should be able to design and implement programs of community-based instruction under each domain.

6. Parents and families: Special educators must be able to identify the needs that parents and families have for training. They should be able to design acceptable strategies to help not only the student who is handicapped, but also his or her family members. Special educators should also be able to develop positive home-school communication systems and be viable resources in the acquisition of needed materials and services.

Transition Concerns for Secondary Students

The successful transition from school to non-school environments is often impeded by the ineffective service options that are currently available to prepare individuals who are handicaps for adulthood (Aveno and Renzaglia, 1988). The U.S. Department of Education, Office of Special Education and Rehabilitative Services, has adopted several strategies for successfully transitioning students from school to non-school environments (Falvey, 1986 p. 135):

1. Include vocational goals in all students' individualized education programs (I.E.P.s).
2. Provide all students with instruction in domestic skills, home and community leisure skills, and skills required for community functioning (e.g., shopping; using public transportation; eating in a restaurant).
3. Maximize contact between students with handicaps and their nonhandicapped peers.
4. Develop curricula designed to prepare students with

handicaps to respond to the demands of adult life.

5. Develop links among Special Education, Vocational Education, Rehabilitation and other adult service agencies.

6. Establish post-school "supported work" models. Educators must work in cooperation with parents, students, employers, employees, other agency staff and the general community in the design and implementation of appropriate vocational, leisure, community and domestic training program (Aveno and Renzaglia, 1988).

Categorical Special Education Programs

There are many classifications that are used in the United States (e.g., autism; learning disabilities; deaf-blindness; speech impairments; etc.). Students who are handicapped in Costa Rica, in contrast, are grouped under one of seven major categories: (1) mental retardation (mild to severe); (2) hearing and language disorders; (3) visual deficiencies; (4) learning disabilities; (5) multiple handicaps (orthopedic handicaps and severe, multiple handicaps); (6) emotional handicaps; and (7) speech and language disorders.

Services to special education students will be described for eight major categories of handicapping conditions. These categories focus on the seven major special education categories utilized in Costa Rica, yet include the principal categories employed in the United

States. Characteristics of the categorical special education programs in the United States will serve as quality program indicators for Costa Rica. The major categories to be investigated are:

1. Learning disabilities.
2. Mild to moderate mental retardation.
3. Severe mental retardation and multiple disabilities.
4. Orthopedic impairments.
5. Hearing impairments.
6. Vision impairments.
7. Emotional handicaps.
8. Speech and language disorders.

It is important to mention that, within each category of special education the degree or frequency of difficulties persons who are handicapped experience vary widely (Hallahan and Kauffman, 1982; Kirk and Gallagher, 1986; Sailor and Guess, 1983; Shwartz and Johnson, 1983; and Sailor, Wilcox, and Brown, 1980). A child with slight visual discrimination problems, for example, may require little special help to function independently in society. Similarly, a child may have a visual-motor problem that affects his or her performance in certain activities that require those abilities but does not affect other activities in his or her life (e.g., singing; counting; etc.).

Haring and McCormick (1986) stated: "No longer is our

principal concern whether or not we should provide full educational opportunity to exceptional children; our concern is now how best to do it" (p. 18). Taking this idea into consideration, the following descriptions of special education services will focus on characteristics of quality educational programs. The analysis of special education services will be focused on the following traits:

1. Definition of each category of students who are handicapped.
2. Instructional considerations (e.g., educational approaches; instructional strategies).
3. Curriculum content.

Services to Students with Learning Disabilities

Students who are learning disabled require an individualized educational program that focuses on the development of their academic potential (Haring and McCormick, 1986). Many of these students are served in regular classes, depending on their educational needs.

Definition. Individuals who attempt to find or derive a precise, comprehensive definition of the term "learning disability" are likely to meet much difficulty, partly because of problems related to both taxonomy (classification) and semantics (meaning) (Myers and Hammill, 1982). It appears that many professionals and parents have no clear idea about who people with learning disabilities are (Mercer, Hughes, and Mercer, 1985). A

definition of learning disabilities is required that is both broad enough to include all the diverse conditions under the label and, at the same time, sufficiently definitive to permit the distinguishing of learning disabilities from other handicapping conditions (Mercer, 1983).

The National Joint Council for Learning Disabilities (NJCLD) proposed the following definition:

Learning disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to the central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotional disturbance) or environmental influences (e.g., cultural differences, insufficient instruction, psychogenetic factors), it is not direct result of those conditions or influences.

(p. 6)

The key to treating a learning disability is the identification of the particular disability so that a degree of specificity in habilitation can be instituted

(Kirk and Gallagher, 1986; Mercer and Mercer, 1985; and Smith, Neisworth, and Hunt 1983). Five types of learning disabilities are subsequently suggested:

1. Disorders of spoken language (listening or speaking).
2. Disorders of written language (reading and writing).
3. Disorders of arithmetic.
4. Disorders of reasoning (thinking and conceptualizing).
5. Correlates of learning disabilities (perceptual disorders and motor disorders).

Instructional considerations. Myers and Hammill (1982) suggested that each school should have one designated professional staff member who is a special education specialist or resource teacher who can help students with learning disabilities. Teachers who suspect that any of their students have learning difficulties, should refer these children to the special education teacher in the school for screening and diagnostic assessment (Mercer, 1983). After appropriate assessment procedures have been conducted, the results should indicate whether the students are eligible for special education services. According to Myers and Hammill (1982) and Smith, Neisworth, and Hunt (1983), students with learning disabilities would subsequently receive their special instruction in one of three situations: (1) a regular class, (2) a resource room,

or (3) a special class. Mercer (1983), suggested that, as no two students with learning disabilities have precisely the same needs or characteristics, no one situation can possibly be best for all children affected.

Stephens (1977) noted that one of the first steps any special education teacher should take, when working with students who have mild-moderate handicaps, is to become thoroughly familiar with the instructional systems used by the regular teachers. This is particularly true when dealing with students who have learning disabilities, because so often their needs can be managed successfully by adapting traditional classroom methods' or by reteaching the basal series that provided such an obstacle when introduced in the regular classroom (Hallahan and Kauffman, 1982).

There are five major approaches to planning educational programs for students with learning disabilities: (1) process training, where the focus is placed on training the underlying processes involved in learning, such as auditory perception or visual discrimination; (2) multisensory approaches that use a combination of sensory systems during academic instruction, including vision, hearing, touch and movement; (3) structure and stimulus reduction, where the focus is placed on teacher-directed activities in a controlled environment; (4) skill models that break down into small steps for instruction; and (5) behavior modification approaches that include techniques such as modeling, self monitoring and positive reinforcement

(Hallahan and Kauffman, 1982). The majority of educational programs for students who are learning disabled use a combination of approaches that emphasize direction of language and academic skills.

Curriculum content. Curriculum content for students with learning disabilities will vary, depending upon the unique educational needs of each student. Areas of instruction that are frequently addressed include (Hallahan and Kauffman, 1982; Kirk and Gallagher, 1986; and Myers and Hammill, 1982):

1. Academic skills (e.g., reading; writing; spelling; math).
2. Oral language skills (e.g., articulation; phonology; morphology; syntax; semantics; pragmatics).
3. Social-emotional skills (e.g., social interactions; self-concept; attention tasks; adaptive behavior).
4. Gross motor skills (e.g., coordination; balance).
5. Perceptual-motor skills (e.g., visual-motor skills; visual discrimination; auditory perception; spatial relationships).
6. Functional living skills (e.g., domestic skills; recreation and leisure skills; vocational skills; community functioning skills).

Services to Students with Mild to Moderate
Mental Retardation

The educational requirements of a student with mild to moderate mental retardation will vary, contingent upon many factors which include: the degree of mental retardation; the level of adaptive behavior; and the personal interests, abilities, wants, needs, and preferences of the student. Some of these students will also have sensory, orthopedic, and/or behavioral disorders that will necessitate the assistance of support personnel (e.g., speech therapist; behavioral specialist; adapted physical education teacher).

Definition. The American Association on Mental Deficiency (AAMD) defines mental retardation as "... a significant subaverage intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period" (Grossman, 1983, p. 11). This definition consists of psychometric and social inadequacy elements and specifies an upper chronological age for the emergence of the condition. These three elements must be met before the person is identified as mentally retarded:

1. Significantly subaverage general intellectual functioning: "Significantly" subaverage is defined as an IQ of 70 or below on standard measures of general intelligence. The 1983 AAMD definition suggests the use of an upper IQ range of 70 to 75 rather than exact point of 70

(Grossman, 1983; MacMillan, 1982)).

2. Impairments in adaptive behavior: This element refers to significant limitations in the person's ability to meet the standards of maturation, learning, personal independence, social responsibility, or some combination of these, as expected for persons of the individual's age and cultural group (Grossman, 1983). Adaptive behavior can be measured by standardized scales or assessed by clinical judgement (Patton and Payne, 1986).

3. Developmental period: The condition should be identified between conception and the eighteenth birthday (Grossman, 1983).

Instructional considerations. The educational programs of the students with moderate mental retardation are less academically oriented than programs for students with mild mental retardation (Vitello and Soskin, 1985). All programs, however, should emphasize the instruction of skills that will enable each student to become as independent as possible in home and community environments (MacMillan, 1982).

Students with mild mental retardation typically receive instruction in the regular class, with specialized instruction provided by a consulting teacher, an itinerant teacher, or resource specialist. Students who have moderate mental handicaps may be placed in a regular class with special education provided in a resource room, or they may

be placed in a self-contained class and be mainstreamed for different subjects and activities.

The instructional strategies employed with students who have mild to moderate mental retardation are similar to those used with students who have learning disabilities. Students who have moderate mental retardation, however, are more likely to require the assistance of support personnel. Students in this latter group will also need a greater emphasis on functional academics (e.g., telling time; counting money; reading community signs); whereas students with mild mental retardation will have a more traditional academic focus.

Educational approaches frequently used with students who have mild to moderate mental retardation include: (1) the developmental approach, whereby infants and preschool children are encouraged to meet normal developmental milestones; (2) the behavioral approach, which incorporates task analysis, systematic instruction, and reinforcement theories; (3) the traditional academic approach; and (4) the community adaptation approach, which emphasizes the instruction of functional skills in natural home and community environments (Writer, 1981). A combination of approaches that incorporates academic instruction, behavioral methodology and functional skills development has proven most effective with these students.

Curriculum content. Curriculum content for students with mild to moderate mental retardation will vary,

depending upon the student's age. Haring and McCormick (1986) and Hallahan and Kauffman (1982) suggest that the following content areas be addressed:

1. Preschool classes: The focus should be on the development of readiness skills for later learning (e.g., language skills; gross and fine motor skills; attending behavior; social skills).

2. Elementary classes: They should also be oriented toward providing children with readiness skills. Curricula should emphasize concepts of language development, concept formation, critical thinking, and independent behavior. Academics and socially adaptive behavior should also be stressed.

3. Secondary school classes: Academic programs should be oriented toward writing, reading, and arithmetic, for the purpose of every day living and employment. Social skills and functional living skills (e.g., domestic skills; leisure skills) should also be addressed.

4. Work-study programs or vocational/occupational programs: students should be placed in work situations in the community and their academic program be oriented so that it supplements the work experience. A continuum of programs should be afforded students that progress them from non-paid work experiences to supported employment to competitive employment.

Services to Students with Severe Mental Retardation and Other, Multiple Disabilities

Students who are severely handicapped typically have multiple disabilities that may, or may not, include mental retardation. These students constitute an extremely heterogeneous group with diversified wants, needs and interests.

Definition. Sailor and Haring (1977), Sailor and Guess (1983), Sontag, Smith, and Sailor (1977), noted that children or youth are considered severely handicapped if they require instruction in basic skills, despite of the characteristics of the handicapped condition. Basic skills include gross and fine motor skills, perceptual-motor skills, communication skills, self-help skills, cognitive skills (including functional academics), and social skills. Students who are multihandicapped have two or more disabilities (e.g., cerebral palsy and blindness), the combination of which precludes their receipt of an appropriate education solely through placement in a classroom designed to serve students with a singular disability (e.g., blindness). Subclassifications of students with severe handicaps include the following:

1. Severe-profound mental retardation: These students have an IQ of less than 50 and require a curriculum focus on both basic skills and functional living skills (Hallahan and Kauffman, 1982).

2. Severe behavioral disorders: These students may display tantrums, repetitive and/or bizarre movements and postures, withdrawal and social rejection, or unpredictable emotional changes, such as an extreme display of fear (Schwartz and Johnson, 1983). These students require consistency and structure in their environments for educational and personal success.

3. Autism: These students demonstrate a severe disorder of childhood, usually by age 2 1/2. They are characterized by a lack of social participation, noncommunication, stereotyped behavior, and lowered cognitive and language abilities (Haring and McCormick, 1986 p. 509).

4. Severe multiple disabilities: These students present two or more handicaps that severely impair their ability to fully participate in normal, routine activities (Valletutti and Sims-Tucker, 1984).

5. Deaf-blindness: These students have auditory and visual handicaps, the combination of which causes such severe communication and educational problems that they can not be properly accommodated in special education programs solely for students who are hearing handicapped and/or visually handicapped (Valletutti and Sims-Tucker, 1984).

Instructional considerations. It is important to mention that students with severe to profound mental retardation generally have other handicaps and are considered multiple handicapped (Kirk and Gallagher, 1986).

MacMillan (1982) noted, however, that some students have multihandicaps but they are not mentally retarded. Helen Keller, for example, was both deaf and blind but was gifted intellectually (Vitello and Soskin, 1985).

The development of educational programs for children and youth who are severely or multiply handicapped requires an analysis of their daily routine, skill assessment, identification of teaching goals and strategies, staff training, and management of the many elements and participants in the program (Salend and Washin, 1988). Haring (1975), noted that the first skills that should be taught students who have severe handicaps are ones that will help them to function as independently as possible in society.

Educational approaches frequently used with students who have severe, multiple disabilities include (Writer, 1981):

1. The developmental approach (with infants and preschool children only).
2. The behavioral approach.
3. The community adaptation approach.

A major concern in educating students with severe, multiple handicaps is to provide the instruction in non-school, natural environments (Certo, Haring, and York, 1984; Brown, Ford, Nisbet, Sweet, Donnellan, and Guenewald, 1983; and Snell and Browder, 1986). As a result, educators have begun to focus on the development of chronological age-

appropriate skills in the environments in which those skills are needed (Brown et. al., 1983). It is not uncommon today to see students with severe handicaps spending at least 10% of their time at school sites and 90% in community-based training sites by the time they are in secondary school (Hamre-Nietupski, Nietupski, Bates, and Maurer, 1982).

Skills taught students with severe handicaps should be functional ones that they have reason, motivation and opportunity to use in their home and community environments. Sailor, Wilcox, and Brown (1980), suggest that teachers ensure that the following characteristics be present in each long-term goal written for students who are severely handicapped:

1. It is age-appropriate.
2. It can be taught in a least-restrictive environment.
3. It can be visualized as a specific, useful skill.
4. It is related to the student's abilities.
5. It can be broken down into subskills that can be taught in sequence as short-term instructional objectives.
6. It is a useful, functional skill that will increase the student's independence in a natural (home and community) environments.
7. Together with other educational goals, it fits into a coherent, pattern that focuses on the student's

overall educational program.

8. It was derived from a systematic evaluation of the student's level of functioning in natural environments, taking into consideration any environmental modifications or special equipment that the student will need to function as independently as possible.

Curriculum content. Sailor and Guess (1983), Sailor and Haring (1977) and Sontag, Smith and Sailor (1977) suggest that the following areas of concern be addressed in programs for students with severe handicaps:

1. Fine and gross motor skills, including mobility.
2. Perceptual-motor skills.
3. Self-help skills (e.g., eating; dressing; toileting; personal hygiene and appearance).
4. Receptive and expressive communication skills, including non-speech communication skills.
5. Social skills, including interactions with chronological-age peers who are nonhandicapped.
6. Cognitive skills (e.g., attention; discrimination; problem solving; causality; functional academics).

All of the aforementioned categorical areas of concern should be addressed within functional activities under each of the major environmental domains: vocational, domestic, recreation and leisure, and community functioning. The authors noted that domain-related activities are critical

to the development of students' independent functioning in their home and community environments.

Services to Students with Orthopedic Impairments

Students who are orthopedically impaired require special education services for skeletal or muscular handicaps. Students who have neuromuscular dysfunction caused by cerebral palsy are classified as multiply handicapped in Costa Rica.

Definition. Hallahan and Kauffman (1982, p. 324) define students with orthopedic impairments as "... those whose nonsensory physical limitations ...interfere with school attendance or learning to such an extent that special services, training, equipment, materials, or facilities are required." Many of these students have secondary handicaps, including sensory, cognitive, communicative and/or behavioral disorders. Subclassifications of students with orthopedic impairments include:

1. Neuromotor impairments (e.g., cerebral palsy; spina bifida; muscular dystrophy; multiple sclerosis; spinal cord injuries).
2. Skeletal deformities (e.g., congenital or acquired limb amputations; arthrogryposis).
3. Global developmental delays (e.g., severe delays in motor skills development, such as those experienced by students with severe to profound mental retardation).

Instructional considerations. A transdisciplinary approach to the instruction of students with orthopedic impairments is required, due to the multiplicity of the disorders that many of them experience. It is important that teachers know what other disciplines are involved in the care and treatment of each student, and be able to communicate with these professionals in the design of comprehensive educational programs.

Writer (1981) suggested that specialized equipment for students with orthopedic impairments is needed to facilitate proper positioning and handling, along with special materials and supplies required for participation in the education environment (e.g., toys; mats; pillows; standing tables; support chairs; and adapted wheelchairs). Maloney and Murphy (1978) described a number of different standard equipment important for positioning students with orthopedic impairments. Many of these can be economically made by classroom teachers. Other types of equipment may also be needed, such as adapted spoons, bowls, plates, and cups for teaching feeding and drinking skills (Bigge, 1982). Practical equipment suggested by Sailor and Guess (1983) included a refrigerator and stove for food preparation, several child-height tables and chairs for feeding and group instruction, and storage furniture so that instructional materials can be separated for each student.

Special materials may also be required for academic

instruction (e.g., pencil grips; stanted surfaces for holding writing paper; page turners for books) (Bigge, 1982). Some students may use tape recorders for completing assignments, and others may use electric typewriters. The computer is an essential tool in the education of all students with orthopedic impairments.

There are many students with orthopedic impairments who are unable to use speech as a primary means of communication. These students need to be provided with augmentative communication systems that may include communication boards, electronic communication aides, and computerized systems (Bigge, 1982). The classroom teacher must be specially trained in the selection, design and application of appropriate non-oral communication systems for students.

Hallahan and Kauffman (1982) noted that students who are orthopedically impaired frequently have medical problems. Hansen (1982), recommended that special education teachers keep a medical and health form for each student, in the classroom. This form should include: student's name, physician's name and phone number, medical history, person to contact in case of an emergency, student's home phone number, and parents' business phone. The form should be situated in an easily available place, where everyone can see it in case of an emergency (Kirk and Gallagher, 1986).

Curriculum content. Curriculum content should be individualized to meet the unique educational needs of each student. Bigge (1982) recommended that the following areas of concern be addressed in special education programs for students with orthopedic impairments:

1. Academic abilities.
2. Communication skills.
3. Mobility skills.
4. Activities of daily living (e.g., cooking; dressing; housekeeping; use of public transportation; grooming).
5. Social skills.
6. Perceptual-motor skills.
7. Fine and gross motor skills.
8. Vocational skills.

Services to Students with Hearing Impairments

Students with hearing impairments range from those with mild hearing losses to those with a complete loss of hearing. The significant factor is that the students require special education services to reach their full potentials.

Definition. Educators in the field of hearing impairments are concerned with how much the hearing loss is likely to affect the student's ability to speak and develop language (Dickson, 1974). Because of the close causal link between hearing loss and delay in language development,

these professionals categorize students primarily on the basis of language abilities (Ling, 1976). Kirk and Gallagher (1986), described definitions that reflected this educational orientation, as proposed by the Conference of Executives of American School for the Deaf (CEAD) in June of 1975 :

1. Hearing impairment: A hearing disability that can range in severity from mild to profound. It includes the subsets of deaf and hard-of-hearing.

2. Deaf: A person who is deaf is one whose hearing disability precludes successful processing of linguistic information through audition, with or without a hearing aid.

3. Hard-of-hearing: A person who is hard-of-hearing has residual hearing sufficient for successful processing of linguistic information through audition, generally with the use of a hearing aid.

The most common way to classify the causes of hearing loss is on the basis of the location of the problem within the hearing mechanism (Davis and Silverman, 1978). There are two major classifications: conductive hearing loss and sensorineural hearing loss (Haring and McCormick, 1986).

1. Conductive hearing loss: Refers to impairments that interfere with the transfer of sound along the conductive pathway of the ear (Ling, 1976). This loss is caused by damage to the outer or middle ear.

2. Sensorineural hearing loss: Refers to impairments

confined to the inner ear or the eighth cranial nerve that interfere with the conversion of sound waves to neural impulses (Davis and Silverman, 1978).

Instructional considerations. Ling and Ling (1978), said that even a minimal hearing loss can affect language learning and thus, influence educational progress. These authors suggest, however, that the impact of the disability can also depend on the following aspects:

1. The type of the loss (conductive or sensorineural).
2. The degree of hearing loss.
3. The age of the student.
4. The age of the student at the time the hearing loss was detected.
5. The age of the student at the time of intervention.
6. The home environment.
7. The presence of other handicaps.

Electronic aids are vital to the education of students with hearing impairments. The provision of a hearing aid is the first step in the student's educational intervention (Ling, 1976). Learning how to use a hearing aid is essential to the education of all students with hearing impairments (Meadow, 1980). Microcomputers are also being used in over half the educational programs for students with hearing impairments (Stepp, 1982). Computer utilization requires active participation on the student's part and the continuous use of an interactive communicative format (Brady and Dickson, 1983).

Communication disorders are the primary handicapping condition of students with hearing impairments. Ling (1976) noted that students with hearing disabilities require instruction in three aspects of language: content, syntax, and function. According to Haring and McCormick (1986), there are three main linguistic approaches to the education of students with hearing impairments:

1. The aural-oral approach: The goal of this approach is to enable students to participate in society and in the community around them in as normal a manner as possible. To achieve this goal, instruction focuses on the hearing impaired student's learning to speak, read lips and use their residual hearing the best they can (Ling and Ling, 1978).

2. The manual communication approach: Proponents of this method suggest that students with hearing impairments should use sign language or fingerspelling as their principal means of communication (Dickson, 1974).

3. Total communication approach: Advocates of this method believe that any and all means of communication should be used to teach students with hearing disorders. It is a combination of the aural-oral approach and the manual communication approach (Garretson, 1976).

Curriculum content. curriculum content for students with hearing impairments varies with age. Haring and McCormick (1986) recommended that the following areas of

concern be addressed in educational programs for these students:

1. **Preschool Classes:** An enriched linguistic environment full of contextual cues, gestures, sign language, and auditory input should be afforded students. Hearing aids should be provided along with training in the use of residual hearing. Object concepts and labeling should be taught simultaneously in natural contexts. Speech and vocalizations should be encouraged and parents should be taught how to communicate with their child (Moore, 1982). Communication skills and social skills should be emphasized.

2. **Elementary School Classes:** There are many educational curricula developed specifically for students with hearing impairments. It is the responsibility of the teacher to use the best program for each student (Hallahan and Kauffman, 1982). Teachers should rewrite materials (e.g., social studies; science; reading) that are standard for students with normal hearing to accommodate communication differences (Kirk and Gallagher, 1986). The school program should emphasize communication skills, social skills, and academic instruction.

3. **Secondary School Classes:** Secondary curricula should focus on reading and writing abilities. Teachers should summarize text materials and supplement them with study guides and other visual materials. The use of computers in instruction greatly facilitates learning for these

students. Additional areas of curricular concern include vocational skills, domestic skills, community functioning skills, leisure skills and social interaction skills with persons who are nonhandicapped.

Services to Students with Vision Impairments

The term "visually impaired" is inclusive of students having moderate to severe visual impairments. These students range from those who have good residual vision to those who are totally blind.

Definition. The two most common ways of describing visual impairments are through legal definitions (Barraga, 1983). The legal definition focuses on the student's visual acuity and field of vision and is used for determining his or her eligibility for receiving special benefits and services. A person who is legally blind is one who has a visual acuity of 20/200 or less in the better eye with correction (e.g., glasses) or whose field of vision is narrowed to an angular distance of no more than 20 degrees at its widest diameter (Kirk and Gallagher, 1986).

Many professionals have found the legal definition scheme to be inadequate, as visual acuity is not a very accurate predictor of how a student will function or what his or her educational needs will be (Hallahan and Kauffman, 1982). Educational definitions, on the other hand, classify students on the basis of their requirements for

instruction. They include (Barraga, 1983):

1. Mildly visually impaired: These are students who, though visually impaired, learn through vision with no special accommodations.

2. Moderately visually impaired: These are students who learn through vision, but require special accommodations to do so (e.g., large print; high contrast materials).

3. Severely visually impaired: These are students who must use senses other than vision to learn. These students are considered educationally blind.

Instructional considerations. A variety of equipment and adapted materials are required 'by students who are visually impaired in their school programs. Special aids for students with moderate visual impairments might include lamps, large-print books, raised-line paper, a cassette tape recorder, magnifying aids and closed-circuit television (Corn and Martinez, 1978). Special aids for students with severe visual impairments might include a Perkins Braille, a slate and stylus for taking notes in Braille, talking (recorded) books, a cassette tape recorder, a talking calculator, an Optacon to convert print into tactile letters, and a Kurzweil reading machine to convert print into speech (Hallahan and Kauffman, 1982).

A number of instructional adaptations are required for students who have severe visual impairments to fully benefit from education. Lowenfield (1973) suggested four general principles that are important in the educational

programs of these students:

1. **Concreteness:** Students with severe visual impairments learn primarily through hearing and touch. They must touch and manipulate concrete objects to understand the world around them. Thus, real objects and natural environments should receive a primary emphasis in their educational programs.

2. **Unifying experiences:** The teacher of students who are severely visually impaired must bring the whole into perspective by giving the students concrete experiences and by explaining the relationship of objects and places. Visual experiences tend to unify knowledge. For example, the sighted student who goes to the grocery store can see the objects on the shelves and can, subsequently, relate the objects and the shelves in space. Teachers of students who are visually impaired should provide similar experiences to their students through the use of real objects in natural environments (e.g., post office; farm; restaurant; grocery store).

3. **Learning by doing:** A student who is blind does not reach out for an object unless that object attracts him or her through other senses (e.g., touching, smelling, and hearing). The teacher should include educational materials that are attractive to the child and also that stimulate the student to reach or to make contact with different objects.

4. **Translating visual data:** Students who have severe

visual impairments must have visual information (e.g., picture; print) translated auditorilly. The teacher should read aloud to the students or tell them what is happening.

Curriculum content. Tuttle (1984) felt that the educational programs for students who are visually impaired should be similar to those for sighted children, with a special emphasis on concrete learning, unifying experiences and self-activity. The many needs of students with visual impairments demand a continuum of special services: preschool programs, teacher consultants, itinerant teachers, resource rooms, special classes, and special school programs (Barraga, 1983). Tuttle (1984) noted that many students who have visual impairments are mainstreamed in regular classrooms, with the services of resource rooms and intinerant teachers. The use of new technology, such as computers, has increased the availability of written materials and improved the mobility of these students to less restrictive environments (Ashcroft, 1984). Special curricular areas of concern for students with severe visual impairments might include:

1. Orientation and mobility skills.
2. Braille skills.
3. Domestic skills.
4. Vocational skills.
5. Community functioning skills.
6. Recreation and leisure skills.
7. Listening skills.

8. Social interaction skills with students who are nonhandicapped.

Services to Students with Emotional Handicaps

Students with emotional handicaps may demonstrate a variety of characteristics, including aggression, withdrawal, anxiety, immaturity and learning handicaps. These behaviors must be manifested to an extreme degree by the student over time for him or her to be classified as emotionally handicapped.

Definition. There is no universally accepted definition of emotional handicaps (Hallahan and Kauffman, 1982). Schwartz and Johnson (1981) said, 'however, that most definitions assume that students with emotional problems reveal consistent age-inappropriate behavior leading to psychological conflict, personal unhappiness, and school problems. They noted that their definition depends on the dimensions of intensity and duration to distinguish between normal or exceptional behavior. Long, Morse, and Newman (1980) classified behavior problems into four main disorders:

1. Conduct disorders: Students who are hostile to authority figures, are cruel, or have few guilt feelings.
2. Anxious-withdrawn disorders: Students who are shy, timid, sensitive, or submissive. They are sometimes overdependent or unusually depressed.
3. Immaturity: Students who are inattentive, uninterested in school, lazy, or preoccupied.

4. Socialized-aggression: Students with this problem have some of the same characteristics of behavior problems as those with conduct disorders but are socialized with peer groups, usually a gang.

Instructional considerations. Approaches to modifying the educational programs of students with emotional handicaps include drug therapy, behavior modification, psychodynamic strategies, and ecological approaches (Schwartz and Johnson, 1981). Drug therapy carefully administered under competent supervision can modify maladaptive behavior, when combined with specially designed educational experiences (Conners and Werry, 1979). Behavior modification techniques can yield positive, consistent results in achieving specific objectives and changing students' behavior (Kerr and Nelson, 1983). Psychodynamic strategies can help uncover underlying conflicts and foster academic achievements through promoting projects and creative arts. Ecological approaches focus on the students' interactions with their environment. This latter approach seeks to alter environmental variables that contribute to disturbed behavior through counseling, not only of the student, but also of the student's family and significant others (Williams, 1984).

Students with emotional handicaps benefit from systematic approaches to instruction that include task analyses of skills to be taught, objective documentation of

behavior, and consistent reinforcement practices. Walker and Shea (1988) identified five elements that contributed to successful educational programs for these students:

1. Structure and organization: Programs should include classroom schedules, consistent routines, carefully planned activities, concrete transitions between activities, and good physical classroom organization.

2. Parental involvement: Programs should incorporate ongoing communication with parents, flexible planning of parent contacts, sensitivity to parent priorities, and inclusion of parents in all decision making process.

3. Flexible curriculum: Techniques and procedures should be adapted to meet the individual students' needs, eclectic approaches should be used, and a focus should be placed on skill generalization and transfer.

4. Normalization: Activities, materials and techniques used should be as close as possible to those employed with students who are nonhandicapped.

5. Staff selection: Teachers should be well trained generalists who can facilitate eclectic approaches, rather than specialists who advocate a singular approach.

Curriculum content. Curricula for students with emotional handicaps should be very similar to those employed with regular education students. Special education content areas might include (Gearheart and Litton, 1975; Luftig, 1988; MacMillan, 1982):

1. Communication skills (e.g., speech; language; listening; and nonverbal skills).
2. Personal-social skills (e.g., socializing with people such as family members; friends; peers; and neighbors).
3. Perceptual-motor skills (e.g., visual; auditory; and tactual discrimination; eye-hand coordination; balance; fine and gross motor movements).
4. Functional academic skills: These include skills that help students function in the community as independently as possible (e.g., using money; telling time; reading community signs).
5. Daily living skills: These include skills needed for personal independence (e.g., dressing; grooming; hygiene; eating skills).
6. Vocational or occupational skills (e.g., skills that help students become independent and find a job).

Services to Students with Speech and Language Disorders

Specialized services to students with speech and language disorders typically augment regular education and special education programs. These services may be provided in the student's classroom and/or in a separate therapy room.

Definition. Speech and language disorders include impairments of articulation, language, voice, or fluency

(Bloom and Lahey (1978). Van Riper (1978) stated that "Speech is abnormal when it deviates so far from the speech of other people that it calls attention to self, interferes with communication, or causes the speaker or his listener to be distressed" (p. 43). Bloom and Lahey (1978) give a language definition: "language is the knowledge and use of a set of symbols to represent ideas intentions" (p. 105). Speech, according to McCormick (1986) is "the verbal expression of the language code"(p. 204). Language is considered disordered when it deviates to a significant degree from that which is typical for others of the same age, gender and culture.

Instructional considerations. Understanding the pattern of language acquisition is a an important part of identifying children with communication disorders and developing remediation programs for them (Van Riper, 1978). There are five dimensions in language: phonology (sound), morphology (word structure), syntax (sentence structure), semantics (word meaning), and pragmatics (function). A student can be impaired in any or all of these dimensions (Dickson, 1974).

Children and youth in the United States who have communication disorders receive speech and language services by speech-language pathologists in hospitals and clinics, as well as in private and public schools (Hallahan and Kauffman, 1982). Mainstreaming fits well into the existing speech and language programs for students with

communication disorders (Shames and Wiig, 1982). These students typically respond to the regular education programs with some additional help for their special communication needs (Van Riper, 1978).

Curriculum content. No special curriculum content is typically required for students with speech and language disorders, other than that which might be dictated by additional handicapping conditions (e.g., orthopedic impairments; emotional handicaps; hearing impairments). Students with severe communication disorders, however, might require part-time placement in a special class that emphasizes speech and language development.

Administrative and Support Services

Nietupski et al., (1988) suggested that a team effort is required if quality, community-based programs are to be developed. The team should include the key people in the delivery of the educational programs: parents, teachers, support personnel (e.g., occupational, physical and communication therapists) and special education administrators. The integral involvement of all team members is important and contributes to program success (Snell and Browder, 1986).

Podemski, Price, Smith, and Marsh (1984) felt that the future of the field special education was in the hands of educational leaders. They argued that a good leader in

special education will be interested in the future and current situation of the country. For example, they said that as the year 2000 approaches, a number of significant demographic, educational, social and technological trends will emerge and will influence assumptions made about the future. These factors are important to the visionary leader, who will recognize that special education is only part of an exceptional student's total education. Effective partnerships that are constructive and consistent with appropriate roles and functions must exist among special educators, other educators, parents, and members of the community. Podemski, et. al., (1984) suggested that special education was a subsystem of the total education enterprise and should be integrated with it by its leaders.

It is useful to look at leadership in special education as consisting of a broader group than just the administrators of such programs. Certainly those who work in university settings, as well as in major organizations, such as Council for Exceptional Children (CEC), have had a significant impact on instituting change and will continue to do so (Synder, 1982). For the administrator or a teacher who is a leader, who has the vision to develop innovative practices, and who places the interest of the individual student and his or her family above all else, special education offers a unique opportunity for all the members of the community (Lietz & Towle, 1982). Podemski (1984), and Patterson, Purkey, and Parkey (1986) felt that the

special education leader's main goal was to bring about policy changes so that the needs of the school and the students are identified, resources are committed, and programs are implemented more or less simultaneously.

Mayer (1982), noted that the special education administrator has a broad range of responsibilities concerning such issues as the management of students' records, monitoring students' progress, handling student misbehavior, determining the appropriateness of instructional placements for students who are culturally or linguistically diverse, and handling disputes by parents over the diagnosis or placement of their sons or daughters. The special education administrator in the school should execute the following activities (Podemski et. al., 1984, p. 4) :

1. Inform all personnel within the school building of the status of special education and define their responsibilities with regard to the school program.
2. Involve special education personnel in the scheduling of students for class assignments, especially at the secondary level.
3. Ensure that an honest effort is made to provide special educators with sufficient materials.
4. Assume sufficient interest in the referral and assessment processes of special education to make cost-effective decisions concerning them.
5. Seriously consider the evaluation criteria used to

make judgements about program effectiveness and communicate such criteria to the special education teachers at the beginning of the school year or at the beginning of the teacher's employment.

6. Ensure that the goals and objectives of the special education curricula are integrated with those of regular curricula.

7. Assume an active role in supporting special educators, teachers who often suffer greater job stress than other teachers.

8. Assist in communication with parents and special external personnel and agencies.

One of the primary roles of the school administrator is to perform an evaluation of the educational program's effectiveness at least twice a year (McCarthy and Sage, 1985). According to Lietz and Towle (1982) the specific purposes of the educational program evaluation include the following:

1. To determine the effectiveness of an educational program.

2. To determine the effectiveness of a particular service delivery approach.

3. To determine the extent to which particular curricular approaches are effective.

4. To appraise teacher and support personnel.

5. To appraise program materials.

6. To determine compliance with state and federal

requirements.

7. To evaluate the comprehensiveness of special education programs.

8. To compare the accomplishments of a program with projected objectives.

Structural arrangements for providing special education services to students have changed dramatically, with the passage of P.L. 94-142 (Harris, 1982). The school administrator's main goal must be to design an organizational structure that satisfies the students' needs (Stile and Pettibone, 1980).

The school administrator and other special education personnel deal frequently with the community and, therefore, must be knowledgeable about and able to use general communication and interpersonal skills, as well as special community relations techniques (Snyder, 1982). Volunteers and paraprofessionals can be a valuable asset to the school such service can provide members of the community with opportunities to contribute their talents and learn more about the school (Howe, 1981). Buffer (1980) and Moyer (1982) noted that almost anyone is a potential volunteer: working and non-working parents, members of students' families, students' neighbors, business persons, college and high school students, members of civic organizations, and senior citizens.

Quality Program Indicators Common to
All Special Education Services

Analyzing the information from the review of the literature and taking into consideration the requirements of each of the aforementioned special educational programs for types of students who are handicapped, the following commonly observed quality program indicators became evident:

1. Compliance with each of the aspects mandated by P.L. 94-142 (The Education to All Handicapped Children Act).
2. Nondiscriminatory educational assessment with tests and procedures appropriate to the student's cultural and linguistic background.
3. Ongoing evaluation to assess pupil progress and educational program effectiveness.
4. An individual educational program (I.E.P.) for each student that promotes the development of functional skills that the student can use in home and community environments.
5. Parental participation in educational programs that assists in the accomplishment of educational goals and objectives.
6. Instructional arrangements in which students with handicaps are placed, at least part-time, in regular

classrooms for academic and/or nonacademic instruction.

7. Learning arrangements in which students who are handicapped have systematic, sustained interactions with students who are nonhandicapped.

8. Use of natural, real-life educational materials to promote generalization of skills learned to home and community environments.

9. Inclusion of vocational, domestic, leisure and community functioning skills in students' educational programs.

10. Use of task analysis in the instruction of basic living skills.

11. Use of microcomputers as an educational tool to allow students to progress at their own rate and to provide immediate feedback on performance.

12. Educational curricula that emphasize the development of communication abilities and interpersonal skills.

13. Use of a transdisciplinary team in the development and implementation of each student's educational program.

14. Use of ecological assessments to identify the requirements of the students' natural environments (e.g., home; community).

15. Educational curricula that emphasize chronologically age-appropriate skills, functional activities, and carefully scheduled routines.

16. Inclusion of regular education teachers

in educational program development and other educational activities for students who are handicapped.

17. Ensurance by the school principal and other administrative personnel that special education teachers are actively involved in the decision making process and provision of all available resources to students, parents, and teachers.

Summary

For many Latin American countries, the ability to provide adequate health and rehabilitation services is clearly affected by limited fiscal and human resources. Throughout Latin America, with high levels of poverty, malnutrition and disability, as well as differential support systems for education, there are limited special education services to meet the needs of persons who are handicapped.

In Costa Rica, with a population of little over two million, there has been a conscious effort toward the integration of persons with handicaps into mainstream educational settings. Existing problems in special education services throughout the country have been attributed to the lack of trained personnel, inadequate special education materials, and the fact that the educational assessment materials available are inappropriate for use with students from a Hispanic

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culture.

Relationships need to be enhanced between the two teacher-training institutions in Costa Rica. The Ministry of Education could promote better training to special education teachers through the use of some of the model special education schools and programs as practicum sites for preservice and inservice training. Resource centers for the development and dissemination of effective special education materials also need to be developed in conjunction with the universities and other institutions of higher education.

The literature review on special education services in the United States revealed the great impact that P.L. 94-142 had on the field. Special education programs have increased dramatically across the country, since 1975. The field of special education has moved from a medical model, which focuses on the diagnosis of individual conditions, to an ecological model, which focuses on the individual's interaction with the environment. Parents and national organizations of exceptional children and youth have organized to become a potent political force, influencing legislatures to allocate the best educational resources to students and to special education personnel throughout the country. Attitudes toward the persons who are handicapped have moved from the advocacy of total rejection and isolation to the promotion of integration into all aspects of community and school environments.

The major categories of exceptionality analyzed within the field of special education included services to students with learning disabilities, mild to moderate mental retardation, severe mental retardation and multiple disabilities, orthopedic impairments, hearing impairments, visual impairments, emotional handicaps, and speech and language disorders. Special education programs in the United States must follow P.L. 94-142 to protect the rights of each exceptional student in the country. This law mandates a free and appropriate education to all children and youth with handicaps between the ages of 3 to 21. It also mandates nondiscriminatory assessment with tests and procedures appropriate to the student's cultural and linguistic background. Each student in special education should have an individual educational program (I.E.P.) that is designed to meet his or her unique educational needs.

Parental and family participation in the student's educational program is vital. The inclusion of these significant others on a transdisciplinary team is essential in the development and implementation of each student's educational program. The school principal and other administrative personnel need to work cooperatively to offer students, parents, teachers, and other school personnel the best educational resources available.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

The purpose of the study was to determine program indicators of quality educational services to children and youth who are handicapped and to determine the degree to which these indicators were present in special education services in Costa Rica. Questionnaires, interviews, observations, and a review of the literature were used to provide a comprehensive descriptions of special education programs in Costa Rica.

Research Design

Qualitative and quantitative methods provide different kind of information when used separately. However, when focused on the same issue, quantitative and qualitative methods can triangulate the data collected and such triangulation allows the researcher to better assess the validity and reliability of the findings (Jick, 1979).

Qualitative Approach

Qualitative methods express the assumptions of a phenomenological paradigm that there are multiple realities which are socially defined (Firestone, 1987). Rich

description is necessary to show that the researcher was involved in the setting and to give the reader enough detail to make sense of the situation studied (Cook and Reichardt, 1979).

An observational case study was used to collect qualitative data. This type of study usually focuses on organizations, such as schools, or on some part of an organization, such as a classroom (Borg and Gall, 1983).

It is very important for this study to give the reader a full description of the Costa Rican culture and its special education services. To achieve this goal, however, the study not only collected quantitative data with structured questionnaires, but it also collected qualitative data on why and how cultural and educational values assist, affect, or influence the development of services to children and youth with handicaps.

According to Guba and Lincoln (1981), observational techniques make it possible to record behavior and events as they occur. In this case, observations of special education programs in Costa Rica were conducted in order to obtain information on specific behaviors and events that cannot be gathered with the questionnaire methodology. Guba and Lincoln noted that observational techniques permit data collection in instances where other forms of communication are impossible. For example, cultural values and reactions to persons who are handicapped were observed because it is one of the best ways of record this specific information.

Participant observation is the observational technique that will be used in this study. According to Guba and Lincoln (1981), this technique occurs when:

The fieldworker directly observes the setting but also participates in the sense that he has durable social relations in the setting. He may or may not play an active part in events, or he may interview participants in events which may be considered part of the process of observation. (p. 195).

Data recording from observations took the following forms:

1. Field notes were taken during observations.

Information deemed most valuable by the researcher was recorded. The notes were organized after each observation in different categories (e.g., schools, clinics, or other kind of organizations).

2. Photographs were taken in schools, classrooms, and instructional materials.

3. Videotapes of schools and educational activities were analyzed to provide a more detailed picture of the special education services in this country.

Quantitative Approach

Quantitative methods were utilized in this study to analyze the data recorded with the questionnaires. Descriptive statistics demonstrate the average score in some questionnaire items and the variability of scores for the sample. Statistical procedures were developed to

analyze the data in each question. With the information obtained from the interviews, an analysis of Costa Rican educational services was developed. Data was collected through both interviews and direct mailing.

The Questionnaires

The questionnaires were designed to: (1) obtain demographic information on special education services; and (2) obtain information on aspects of services that are indicative of quality special education programs. Data compiled from part two of the questionnaires, will compare existing services in Costa Rica with quality special education programs elsewhere (e.g., in the United States). The procedures followed in the development and use of the questionnaires included: (a) construction of three separate questionnaires: one for special education administrators, one for teacher educators, and one for special education teachers, b) translation of the questionnaires from English to Spanish, (c) review of the questionnaires by professors from the university of Costa Rica to obtain suggestions for their improvement, (d) direct mailing of each questionnaire to potential respondents and (e) mailing of thank you letters and follow-up statements.

The three questionnaires employed in the study are contained in Appendices A, B and C. Each investigates the respondents' professional activities, their points of view of the field, and their recommendations to improve the

system.

The review of the literature helped the researcher to develop each questionnaire. For example, the researcher developed each question taking into consideration the quality program indicators, teacher training requirements, and the school administrators responsibilities defined in the literature.

The questionnaires were organized in the following manner:

1. Special education administrators' questionnaire:

Background data, demographic data, administrative issues, special education program variables, and special education services in Costa Rica (Appendix A).

2. Special education teachers' questionnaire:

Background data, preservice training, demographic classroom data, special education program variables educational assessment, educational materials and resources, teaching techniques and procedures, cultural variables, and special education services in Costa Rica (Appendix B).

3. Teacher educators' questionnaire: background data, demographic data, demographic data on special education program, special education credentials, textbooks and other teaching materials used, financial support, and demographic data on special education services in Costa Rica (Appendix C).

4. Cover Letter: The cover letter included a description of the study, an explanation of the need and

purpose of the questionnaire, and a statement of informing participants that they would receive a copy of the results (Appendix D).

Validity

Huck, Cormier, and Bounds (1974) suggested that the content validity was the best technique available to researchers using a questionnaire. They agreed that true content validity occurs when there is a rational basis to the selection of the content that can be achieved with the researcher's knowledge of the literature review and his or her own experience.

The questionnaires were constructed based on the information obtained from the literature review in special education services offered in the United States. Professors from the University of Costa Rica reviewed the questionnaires and made suggestions to improve them. The researcher took those suggestions into consideration and rewrote each questionnaire.

Reliability

The subjects who participated in the study were experts in the field of special education and were well qualified to provide reliable information about special education services. They also recommended other professionals in the field that could provide valuable information to the study. To achieve a higher rate of reliability the following procedures were conducted:

1. Examination of the services identified on the questionnaires, interviews, and observations.
2. Examination of the current special education programs in Costa Rica and future projects that might improve the field.
3. A descriptive review of the results with the purpose of conducting further studies.

Selection of Sites

The study was conducted in San José, Costa Rica. This is the capital of the country. The rationale for choosing San José was because the main universities, schools, hospitals, etc., are located in there. It is also the largest city of the country.

Professionals in the field of special education recommended names of schools and other special education programs in the country. Observations were conducted in four special education schools and the Children Hospital of Costa Rica.

Selection of Participants

Questionnaires were distributed to 14 participants: six special education teachers, five teachers educators (four from the University of Costa Rica, and one from the National University of Costa Rica), and three special education administrators (one national-level and two regional-level). The selection of each participant was

based on recommendations from education administrators, university professors, and special education teachers. They suggested names of professionals in the field of special education that could offer valuable information to the study.

Statistical Procedures

Methods

Data from the 14 questionnaires was tabulated by hand and systematically coded. Data was then entered into a VAX computer and processed using the Statistical Package for Social Science (SPSS).

Research Question Number 1. What are the program indicators (characteristics) of quality educational services to students who are handicapped?

The data obtained in the review of the literature described 17 quality program indicators specific to students who are handicapped.

Research Question 2. What is the organizational structure of special education administrative services to students in Costa Rica?

The information gathered to answer this question was collected on a questionnaire through specific questions about the structure of the organization, the decision making process, and the main activities that administrators utilize in their organizations. Frequency distribution

tables, percentages, and the means of items were compiled to organize and analyze the information.

Research Question Number 3. What are the characteristics of special education services provided to children and youth who are handicapped in Costa Rica?

This question was addressed through a checklist and other specific questions on a questionnaire. Participants were requested to provide specific information on the services provided in their school, in other special education programs, and in Costa Rica in general.

Information was requested of participants on the following areas of concern: number of students who need special education in specific schools and in Costa Rica, inservice training opportunities, professional preparation, integration and mainstreaming, specific educational activities, and suggestions to improve special education services in Costa Rica. Frequency tables, percentages, and mean scores were tabulated.

A checklist was utilized for special education teachers and teacher educators to indicate the areas of preservice training afforded special education teachers. Frequencies were calculated on the number and percentage of participants indicating an area of training received in each educational section.

Five-point Likert scales were employed to obtain participants' opinions on cultural variables, adequacy of teacher preparation, and the evaluation of special

education services.

Question Number 4. To what extent are the quality program indicators identified in question one present in current special education services offered to students with handicaps in Costa Rica?

The questionnaire obtained specific information from participants in each of the three groups concerning their professional preparation, the specific activities that they perform in their jobs, the areas of special education in which they received training, specific services offered by each special education program and organization, an evaluation of special education services in Costa Rica, and suggestions to improve these special education services. Frequency distribution tables, percentages, and means of the three groups were calculated.

Question Number 5. What cultural differences need to be taken into account when comparing educational programs in Costa Rica with those in the United States?

The questionnaire included a section on cultural variables related to persons who are handicapped in Costa Rica. A Five-point Likert scale was employed to assess participants' attitudes concerning these variables. Frequency distribution tables, means, and percentage of each response were tabulated.

Narrative responses that address this question were also obtained on the questionnaires. An analysis and summary of each response was conducted to assist in

answering this question.

Question Number 6. What would be the major components or characteristics of a quality education school in Costa Rica that serves children and youth with handicaps?

The information obtained through the review of literature was combined with data collected in response to questions 2 through 5 and an analysis of the major suggestions to improve special education services in Costa Rica to answer this question. Quality program indicators, administrative structure, and teaching requirements were considered when delineating the main aspects of a quality special education school.

CHAPTER FOUR
Analysis Of The Data

Introduction

The purpose of this study was to delineate program indicators of quality educational services to children and youth who are handicapped and to determine the degree to which these indicators were present in special education programs in Costa Rica. This data was subsequently used in the design of a special education school in Costa Rica. Six different research questions were examined.

QUESTION # 1 What are the program indicators (characteristics) of quality educational services to students who are handicapped?

Seventeen quality program indicators were identified through a review of literature and through analysis of components critical to specific special education programs (Cieloha, 1986; Falvey, 1986; Haring and McCormick, 1986; Kirk and Gallagher, 1986; Mayer, 1982; Podemski et. al., 1984; Sailor and Guess, 1983; Sailor, Wilcox, and Brown,

1983; and Writer, 1981). The characteristics that are indicative of quality special education programs are addressed in eight global areas:

1. Teacher education that includes preservice training of teachers related to the types of students they will be serving and ongoing inservice training during their tenure as special education teachers.

2. Educational program development and implementation which emphasizes age-appropriate curriculum content that promotes the development of independent living skills and includes mainstreaming and integration with nonhandicapped students.

3. Non-discriminatory educational assessment that has direct application to the design and evaluation of functional educational programs.

4. A transdisciplinary team approach to educational assessment and programming that promotes the unique educational concerns of each student.

5. Parental participation in all educational processes involved in program planning, implementation and evaluation.

6. Participation of the school principal in all special education activities.

7. Longitudinal transition planning that prepares students for both less restrictive services (e.g., placement at regular school sites) and non-school services (e.g., adult services).

8. Compliance with the special education policies mandated by the national government.

Special education programs should include the above characteristics in order to provide quality educational services to students who are handicapped.

QUESTION # 2 What is the organizational structure of special education administrative services to students in Costa Rica?

Organizational structure was analyzed in three different ways: 1) through interviewing administrators; 2) through the literature provided by the Ministry of Education; and 3) by information gathered on questionnaires.

The national administrative structure of special education services in Costa Rica consists of one director, four sub-directors, and seven advisors (Figure 1). The sub-directors and advisors are responsible for providing supervision and for investigating whether or not the schools are implementing the special education policies that were recommended by the Ministry of Education (Ministry of Education, Department of Special Education, 1987).

Figure 1. Organizational Structure of The Ministry of Education, Department of Special Education Services, Costa Rica.

Table 1

Percentages of Participation From Administrators
In School Activities

Question	Mean N=2
1. Keeping personnel informed of changes in special education policies.	3.9
2. Working with personnel in assessing students to classes.	2.1
3. Obtaining materials for use in special education classrooms.	1.5
4. Participating in the referral and assessment of special education students.	1.5
5. Evaluating program effectiveness and providing feedback about this to teachers.	3.4
6. Ensuring that the goals of the special education curriculum are as close as possible to the regular educational curriculum.	2.0
7. Visiting special education classes.	4.0
8. Talking with parents and families of students.	5.0
9. Communicating with other schools and agencies that serve persons who are handicapped.	3.8
10. Developing curricula for special education programs.	2.0
1=Never 2=Yearly 3=Monthly 4=Weekly 5=Daily	

The administrative structure of the Ministry of Education, Department of Special Education was developed in a way that all the professionals involved on the team make decisions as a group. For example, they work cooperatively in the development of the special education policies that were implemented in all the areas of the country. These professionals used P.L. 94-142 as a model in the

development of the special education policies of the country. Each school, program, or other private or public agency that offers any kind of special education services, subsequently, must heed these special education policies.

The administrative team is also involved in the planning, supervision, and coordination of each public special education program. They are responsible for hiring new teachers, buying educational materials, maintaining communication with other schools or educational programs, implementing and designing new programs, trying to find donors for financial support, and developing professional activities such as seminars or conferences.

Podemski, et. at. (1984) identified 10 quality indicators of special education administrators. The degree to which these characteristics were present in school administrators in Costa Rica was identified on a questionnaire using a five-point Likert scale (Table 1).

The data revealed that the school administrators in Costa Rica actively participate in some aspects of the educational concerns of the schools. The mean scores of 1.5 for questions number three and four revealed that the school administrators minimally participated in obtaining special education materials and in conducting student referrals and assessments. This substantiates the special education teachers' concern over the lack of curriculum materials offered by the schools. Mean scores ranging from

2.0 to 2.1 for questions two, six and ten indicate that administrators are involved on a yearly basis in such activities as assessing students, ensuring that curriculum goals approximate those in the regular curriculum goals approximate those in the regular curriculum, and special education curriculum development. A mean score of 3.4 for question number five indicates that administrators conduct evaluations of program effectiveness on a monthly basis. Mean ranging from 3.8 to 4.0 for questions nine one and seven indicate that administrators are involved weekly in activities that include keeping personnel informed, visiting special education classes, and communicating with other schools and agencies. The mean score of 5.0 for question eight indicates that all administrators surveyed communicated with families of students on a daily basis.

The questionnaire for special education administrators also included five questions related to administrative issues. The administrators were asked to describe their primary role, the structure of their organization, the decision making process, the goals and purposes of their organization and the ethical concerns of the schools. The questionnaire revealed the following information:

1. School administrators are responsible for the financial aspects of the organization and all the concerns related to those issues.

2. Administrators are accountable for hiring and managing the school personnel.

3. Administrators should work as a team with faculty and staff members of the school.

4. The decision-making process of the school involves team work.

5. The administrators are responsible for seeing that the special education policies mandated by the Ministry of Education and Special Education are being followed and implemented by school personnel.

6. The ethical concerns of the three administrators are related to students' privacy and well being.

7. Special Education teachers must be trained in the educational areas in which they are offering services.

8. Only two administrators provided a statement of the purpose of their organization in a written paper. The other administrator explained verbally the goal and the purpose of the organization without having it on paper. The administrators generally seemed to feel that the purpose of their organization was to address the needs of the students who are handicapped and to offer the best educational services so that they can become productive, independent, and successful members of their communities.

Administrators responding to the questionnaire had an average of 1.35 years of experience working with students who are handicapped (Table 2). This means that these three special education administrators do not have a great deal of experience working with students who are handicapped. Only one administrator had no experience. They all did,

however, demonstrate knowledge of the main aspects and needs of special education students during the informal interviews. Two of these administrators had past experiences working as special education teachers.

Table 2

Administrators' Years of Experience Working With
Students Who Have Handicaps

Subjects	Years
1	0
2	1
3	3

Mean = 1.33

N=3

QUESTION # 3

What are the characteristics of special education services provided to children and youth who are handicapped in Costa Rica?

The characteristics of special education services in Costa Rica will be divided into three main sections: 1) special education policies; 2) professional preparation; and 3) special education services offered.

Special Education Policies

The Ministry of Education and the Special Education Division developed the "Costa Rican Special Education Policies" which were based on the ideas expressed in P.L. 94-142. These policies are divided into 10 different sections:

1. Family and Community: the participation of parents, members of the family, and the community play an important role in the organization, development, and implementation of the special education services.
2. Prevention: A national plan of prevention, according to the national necessities, will be developed in cooperation with institutions and be based on information provided by national and international organizations.
3. Detection, Evaluation, and Diagnosis: Evaluation is the process utilized to determine the level of functioning of the person who is handicapped and the educational services that he or she requires. Each student should be assessed at least yearly, before receiving special education services. There are also provisions to insure the non-biased assessment of students.
4. Administration: Special education will be based on the universal principles of administration. Within the Ministry of Education, special education will have its own structure according to the specific requirements.
5. Curriculum: All of the educational curricula employed will promote the maximum development of each

person's skills and it should be applied with the necessary social and cultural adaptations that each person requires. The individualized educational plans written must be functional and should use real materials and situations that promote the idea of integration and normalization.

6. Formation, Training, and Improvement in Special Education: The formation, training, and improvement of special education, and the dynamic interaction between all regular and special education teachers, and all the professionals involved in some manner in special education services are the main interests of the Ministry of Public Education.

7. Coordination: An internal and external institutional coordination has been established with different directors in each area of special education with the objective of providing integral attention to all persons who need special education services.

8. Investigation: The research and study of educational needs and priorities and the development of the special education services will be the foundation upon which to restructure and establish new rules and regulations for the services and programs in the field.

9. Publication: A systematic dissemination of information on all aspects related to special education will be promoted to support persons who are handicapped and their families, and to increase the understanding and awareness of persons who are handicapped within the

community at large.

Professional Preparation

According to data collected on questionnaires, review of literature, and informal interviews, there are two main universities in Costa Rica that offer programs to train future special education teachers. The University of Costa Rica (Universidad de Costa Rica: U.C.R.) is the public university and the National University of Costa Rica (Universidad Nacional de Costa Rica: U.N.A.) is a private one.

The U.C.R. offers a bachelors degree in education with emphasis in special education. It also offers a special education license (requiring two years of post-bachelors study) in multiple handicaps, orientation, special education, and educational science with an emphasis in special education. The university also offers a masters degree program in integral rehabilitation. Professors at U.C.R. reported that in 1990 the university will offer graduate studies in the following specific areas of special education: multiple handicaps, visual deficiencies, language therapy, and hearing impairments. The U.N.A. offers a bachelors degree program in special education with emphasis in learning disabilities. Data generated by the questionnaires revealed a majority of respondents had studied in the U.C.R. (Table 3).

Table 3

Universities Attended by Administrators, Teacher Educators,
and Special Education Teachers

Universities	Group 1 *N=6		Group 2 *N=5		Group 3 N=3	
	N	%	N	%	N	%
Universidad de Costa Rica	6	100%	5	67%	2	100%
Universidad Nacional de Costa Rica	2	40%	1	20%	0	00
Others	0	00%	2	40%	0	00

Group 1= Special Education Teachers .

Group 2= Teacher Educators

Group 3= Administrators

* The numbers are greater than the total because
participants attended more than one university.

Information on respondents' professional background was requested in each of the questionnaires. All but one of the respondents in the three groups reported having at least a bachelors degree. Table 4 summarizes the professional preparation of the respondents by group.

Table 4

Professional Preparation of Administrators,
Teacher Educators, and Special Education Teachers

Degrees Obtained	<u>Group 1</u>		<u>Group 2</u>		<u>Group 3</u>	
	<u>*N=6</u>		<u>*N=5</u>		<u>*N=3</u>	
	N	%	N	%	N	%
Bachelors Degree in Special Education	6	100	2	40	2	67
Bachelors Degree in Other Areas	1	20	3	60	1	33
License in Special Education **	2	40	3	60	1	33
Masters Degree	0	00	3	60	0	00
Ph.D.	0	00	1	20	0	00
No Degree	0	00	0	00	1	33

Group 1= Special Education Teachers

Group 2= Teacher Educators

Group 3= Administrators

* Participants presented more than one professional degree.

** Licenciatura.

Special Education Services

Demographic information from the questionnaires and interviews revealed that Costa Rica has approximately 425 schools that offer special education services, of which 15 are special education schools and 75 are clinics. The services are provided to students from birth to 20 years of age. There are currently approximately 13,000 students who are receiving special education services. However, nobody knows the exact number of children and youth who require special education services in Costa Rica.

Each group of respondents was asked to assess the special education services in Costa' Rica, using a five-point Likert scale. The scale ranged from "definitely not true" to "definitely true" for each question asked. A summary of the responses of the the three groups is contained in Table 5.

The first question investigated the extent to which the majority of children and youth who are handicapped receive special education. A general mean score of 2.4 indicates that the respondents felt that not all exceptional children and youth are receiving education. Special education teachers felt that it definitely wasn't true that the majority of exceptional students received services (mean=1.83). Teachers educators, however, felt that this statement was somewhat true (mean=3.2).

Table 5
Attitudes Concerning Special Education Services in Costa Rica Expressed
By Administrators, Special Education Teachers, and Teacher Educators

Questions	Group 1 N=6	Group 2 N=5	Group 3 N=3	General Mean
1. The majority of exceptional students receive special education.	1.83	3.20	2.33	2.40
2. Special education teachers are well paid compared to teachers of nonhandicapped students.	1.66	2.20	1.33	1.78
3. Students who receive special education receive quality services that meet their needs.	2.66	3.80	2.66	3.07
4. All children and youth with handicaps are offered a free, public school program.	4.00	4.20	3.33	4.00
5. Students who graduate from special education programs are prepared to be productive members of their communities	3.00	3.20	2.33	2.92
6. Adults who are handicapped leave happy lives.	3.66	2.80	3.00	3.20

Group 1= Special Education Teachers

Group 2= Teachers Educators

Group 3= Administrators

Responses: 1= Definitely Not True

2= Definitely Not True/Somewhat True

3= Somewhat True

4= Somewhat True/Definitely True

5= Definitely True

Table 5. (Continued)

Questions	Group 1 N=6	Group 2 N=5	Group 3 N=3	General Mean
7. Adults who are handicapped actively participate in the community activities.	2.83	3.20	3.00	3.00
8. Special education teachers and regular education teachers work cooperatively in the design of educational programs for students with handicaps.	2.83	3.20	2.33	2.85
9. Students with handicaps are taught the same skills that nonhandicapped students the same age would do	3.83	2.40	2.00	2.80
10. Costa Rica provides quality special education services to children and youth who are handicapped	3.33	4.20	3.66	3.64
11. Compared to other Latin American countries, Costa Rica provides quality educational services	4.00	4.40	3.66	4.00
12. Compared to European and North American countries, Costa Rica provides quality educational programs	3.16	4.20	4.00	3.70

Group 1= Special Education Teachers
Group 2= Teachers Educators
Group 3= Administrators

Responses: 1= Definitely Not True
2= Definitely Not True/Somewhat True
3= Somewhat True
4= Somewhat True/Definitely True
5= Definitely True

The second question investigates whether special education teachers were well paid in relation with regular education teachers. A general mean score of 1.78 reveals that the majority of the respondents believed that the statement was not true. The special education teacher group reported in informal interviews that their salaries were very poor in comparison with other professionals' salaries, including regular education teachers. The majority of the teachers reported have two different jobs at the same time in order for them to make a living.

Question number three investigates the quality of special education services offered children and youth who are handicapped. A general mean score of 3.07 indicates that the participants believed it was somewhat true that students are receiving quality educational services. The special education teacher group reported that they offer good, effective, quality services. However, they noted in the informal interviews that because of the high number of students in each class and the lack of any teacher aids, the educational quality was sometimes poor and hard to improve under the circumstances.

The fourth question examined whether all the children and youth who are handicapped received free public education. A general mean score of 4.0 indicates an attitude between somewhat true and definitely true. The highest score was given by teacher educators (4.2) and the lowest score by administrators (3.33). Literature from

Costa Rica indicates that this country has a law that demands free and appropriate education to all its citizens. However, some persons in this study believed that not all children and youth who need special education were receiving it.

Data on question number five revealed that it is somewhat true (2.92) that the students who graduate from special education programs are prepared to be productive members of their communities. Eighty two percent of the special education teachers reported that of students who graduate from their programs were productive members of their communities. Eighteen percent of the teachers reported that the other graduates from special education programs were either doing nothing or could not find a job in their communities.

The sixth and seventh questions concerned adults who are handicapped. Question number six investigated whether adults who are handicapped lived happy lives. A general mean score (3.20) revealed that it is somewhat true. The lowest mean score (2.8) was reported by teacher educators, who felt that it was questionable whether adults with handicaps lead happy lives. The special education teachers were more optimistic (mean=3.66) that adults were happy. Question number seven, which examined the participation of adults in community activities, generated a general mean score of 3.0; indicating that it was somewhat true that these persons were involved in their communities.

The eighth question analyzed whether special education teachers and regular education teachers worked cooperatively to develop educational programs for exceptional students. A general mean score of 2.85 indicates that the statement was somewhat true. Program administrators felt that it was definitely not true to somewhat true (mean=2.33) that special educators and regular educators worked cooperatively, while teacher educators felt that this was somewhat true (mean=3.2). Special education teachers reported that sometimes it is impossible for them to get together with regular education teachers because time limits and the number of students in each class impedes such activity from frequently occurring.

Question number nine analyzed whether students with handicaps were taught the same skills that nonhandicapped students the same age would do. A general mean score of 2.8 indicates that participants believed the statement was somewhat true. Special education teachers felt that students with handicaps were taught the same skills as their nonhandicapped peers (mean=3.83). Administrators, on the other hand, felt that this was not the case (mean=2.0). It is possible that special education teachers serving students at special schools may not be accurate in their perceptions, as they are not familiar with the curriculum at regular school sites. Administrators who regularly observe both types of sites might be better able to

perceive discreet differences. On the other hand, it would sometimes be inappropriate to teach special education students the exact skills that are taught nonhandicapped students of the same age (e.g., teaching fourth grade students with severe mental handicaps fourth grade geography).

Analysis of whether Costa Rica provides quality special education services, question ten, resulted in a general mean score of 3.64 indicating that the respondents believed that the statement is somewhat true. Teachers educators obtained the highest mean score (4.20), which indicates that they do believe that the statement is almost definitely true. Special education teachers and administrators, on the other hand, obtained a mean scores of 3.33 and 3.66 indicating that they believed that the statement is only somewhat true.

The last two questions related to the comparison of Costa Rican special education services with those in a) Latin America and b) North America and Europe. A general mean score of 4.0 indicates that the participants felt that it was almost definitely true that Costa Rica provided quality special education services compared to other Latin American countries. A lower general mean score of 3.7 was given by the respondents when comparing Costa Rica special education services with those provided to Europe and North America. Administrators and teachers educators believed that Costa Rican special education services are not only a

good example for other Latin American countries, but also for many European and North American countries.

Respondents were asked to evaluate the special education services in Costa Rica using a five-point Likert scale. Table 6 indicates the results.

Table 6

Evaluation of Special Education Services Provided
in Costa Rica

Answers	Group 1		Group 2		Group 3	
	N=6		N=5		N=3	
	F	%	F	%	F	%
Poor	1	16	0	00	1	33
Poor/Average	0	00	0	00	1	33
Average	4	66	1	20	0	00
Average/Outstanding	1	16	2	40	1	33
Outstanding	0	00	2	40	0	00
General Mean	2.83		4.20		2.33	

Group 1= Special Education Teachers

Group 2= Teachers Educators

Group 3= Administrators

Overall Mean=3.7

A comparison of the mean scores of teacher educators (4.20) with the special education teachers (2.83) and administrators (2.33), demonstrates a significant difference between these groups. Teachers educators believed that their country offered above average to

outstanding services, whereas the special education teachers and administrators felt that these services were only poor to average. A comparison of these scores with those generated for question ten on Table 5 (which evaluated the quality of Costa Rican services) reveals that the evaluation of services made by the teacher educators appears to be constantly higher than the other two groups. It is possible that teacher educators are falsely optimistic about the quality of special education services, as they have limited contact with special education programs. It is also possible that special education teachers and administrators are falsely pessimistic regarding services, as they are discouraged by the rigors of day-to-day instruction and service provision.

Question # 4

To what extent are the quality program indicators identified in question one present in current special education services offered to students with handicaps in Costa Rica?

Seventeen quality program indicators were subsumed within eight global areas, as described in the analysis of question one. The degree to which these indicators are present in special education services in Costa Rica was analyzed through the review of literature and questionnaires completed by administrators, special

education teachers and teacher educators. The following six aspects were analyzed: 1) preservice and inservice training of teachers; 2) The development and implementation of functional curricula that promotes independent living skills in students who are handicapped; 3) Non-discriminatory evaluation and assessment that describes transitions; 4) a transdisciplinary team approach to assessment and programming; 5) parental participation in educational concerns; 6) the involvement of the principal in all aspects of educational concerns; 7) the development of longitudinal transition plans; and 8) compliance with national education mandates.

1. Preservice and Inservice Training of Teachers:

Questions related to inservice and preservice training were addressed in the questionnaires for all three groups. Although none of the administrators or special education teachers subscribed to any professional journals, some teacher educators did (Table 7). The majority of the teachers educators also reported to be members of the Council for Exceptional Children (C.E.C.), which is an international organization for professionals and other people involved in special education.

Table 7

Percentage of Respondents Who Subscribe to
Professional Journals.

Journals	<u>Group 1</u>		<u>Group 2</u>		<u>Group 3</u>	
	N=6		N=5		N=3	
	N	%	N	%	N	%
Council of Exceptional Children	0	0%	3	60%	0	0%
American Journal of Mental Retardation	0	0%	1	20%	0	0%
NONE	6	100%	1	20%	3	100%

Group 1= Special Education Teachers

Group 2= Teachers Educators

Group 3= Administrators

Table 8

Inservice Training Received by Special Education Teachers

Years	Number of Inservice Training Activities Engaged by Teachers Subjects						Receiving Training %
	1	2	3	4	5	6	
1980-1983	1	0	2	0	0	0	50%
1984-1987	1	1	1	1	1	1	100%
1988- +	0	0	0	1	1	0	33%

N=6

The number of special education teachers who received inservice training is presented in Table 8. From 1984 to 1987 all teachers received some kind of inservice training. However, only two teachers received inservice training from 1988 to the present. This information indicates that teachers are receiving a low level of inservice training.

Table 9

Content of Inservice Training Received by Special Education Teachers

Conference Topic	N	%
The Language Development of Exceptional Children	2	33%
Evaluation and Development of Motor Abilities for Students with Cerebral Palsy	1	16%
Neuropediatric Actualization	1	16%
Latin American Convention of Special Education	2	33%
Child Abuse: Prevention and Strategies	1	16%
Early Stimulation in Childhood	3	50%
Mental Retardation: Theory and Practice	1	16%
Learning Disabilities	1	16%

N= 6

Table 9 presents the content of the inservice training received by special education teachers. The area in which the most teachers (50%) received training was early stimulation. The conference on this topic was held in Costa Rica, which enabled more educators to attend. Many of the other inservice training conferences were held in neighboring countries, thus limiting the attendance of Costa Rican teachers.

Figure 2 indicates the years of experience in special education reported by each group. Teachers educators reported the the most years of special education experience (mean=14.4), and administrators reported the least years of experience (mean=1.33). As only two of the administrators surveyed reported any preservice training in special education, it would seem vital that this group receive inservice training that better enables them to effectively fulfill their job roles.

Special education teachers were requested to indicate the areas in which they received preservice training. Teachers educators were, likewise, requested to indicate the special education areas that they provided training in. The data presented in Table 10 indicates that all of the teachers surveyed received training in almost all the main special educational areas delineated through a review of the literature and that teacher educators concur. None of the special education teachers, however, reported receiving any training in the use of computers. This is understandable, because almost none of the special education programs in Costa Rica have computers for students. In addition, only 50% of the teachers reported receiving any kind of training in the development of community living skills. Data presented in Table 5 indicated the need to have persons who are handicapped more fully integrated into their communities. This can only occur, if special education teachers are prepared to

develop community living skills in students through functional educational programs that include community-based instruction. It should be noted that all six teachers received their bachelors degree in special education from the same university, therefore, this data may not be reliable.

Figure 2. Average Years of experience Respondents Have In
The Field of Special Education

Table 10

Areas of Preservice Training Provided for Special
Education Teachers, as Reported By Teachers and Teacher
Educators

Areas of Training	Group 1		Group 2	
	N=6		N=5	
	N	%	N	%
1. Educational assessment of special education population	6	100%	5	100%
A. Using special tests	5	83%	5	100%
B. Assessing requirements	6	100%	5	100%
2. Pupil classroom management	6	100%	5	100%
3. Adapted teaching techniques & procedures	6	100%	5	100%
4. Documentation & record keeping	6	100%	5	100%
5. Writing weekly lesson plans	6	100%	5	100%
6. Designing long-term IEP educational goals	6	100%	5	100%
7. Classroom organization & design	6	100%	5	100%
8. Special curriculum development	6	100%	4	80%
A. Academic skills	6	100%	5	100%
B. Social skills	5	83%	5	100%
C. Communication skills	6	100%	5	100%
D. Perceptual skills	6	100%	5	100%
E. Fine & gross motor skills	6	100%	5	100%
F. Daily living skills	6	100%	4	80%
G. Vocational skills	5	83%	4	80%
H. Recreation and leisure	5	83%	4	80%
I. Community skills	3	50%	4	80%
9. Use of computers	0	0%	1	20%
10. Conducting task analysis	6	100%	5	100%
11. Working with other professionals	6	100%	5	100%

Group 1= Special Education Teachers

Group 2= Teacher Educators

Some of the special education training areas indicated by teacher educators in Table 10 coincide with those of special education teachers. Although teachers reported to have had no training in the use of computers, only one teacher educator indicated that they do give training in that area. Both groups do agree on most of the curriculum areas in which preservice training was reported. 50% of the teachers reported that they received no training in the development of community skills, whereas 80% of the teachers educators stated that they did provide training in that areas.

Table 11 reflects the special 'education teachers' overall evaluation of their preservice training program. The preponderance of teachers (83%) felt that the preservice training they received was only average and one teacher felt that it was poor. These perceptions validated the need for increased inservice training of special education teachers in areas directly related to their job assignments.

Table 11

Special Education Teachers' Evaluation of
Preservice Training Received in Costa Rica

Evaluation	Special Education Teachers	
	F	%
1. Poor	1	17%
2. Poor/Average	0	0%
3. Average	5	83%
4. Average/Outstanding	0	0%
5. Outstanding	0	0%

N=6

2. Curriculum Development and Implementation: Table 10 indicates that special education teachers have received training in the main curricular areas requisite for students who are handicapped. Three open-ended questions were included on the special education teachers' questionnaire about the development and implementation of educational programs. The six teachers reported similar answers about how they develop individual educational plans for each of their students. A summary of the main educational aspects follows:

1. Teachers develop educational programs approximately every year. However, they divide that plan into monthly

activities and then into weekly activities. Evaluation of program effectiveness is every three months.

2. Educational goals and objectives are describe in each student's educational plan, indicating specific steps to accomplish each goal and the person responsible to work with the student in each educational area (e.g., language development with the language therapist).

3. Teachers develop their own educational materials. Their schools rarely provide financial support for buying new materials.

4. Real-life materials are often used to teach students and to develop skills.

5. Socialization and vocational skills are included in each student's educational program.

6. Because the teacher/student ratio is too large, teachers reported that sometimes one-to-one instruction is minimal. Group activities are more often conducted.

7. Students with mild to moderate handicaps are integrated into regular education programs. However, students with severe disabilities are placed into self-contained special education classes or special education schools.

8. Regular education teachers and special education teachers work cooperatively in the development of educational programs for students with handicaps.

Table 12

Percentage of Major Curriculum Areas Utilized by
Special Education Teachers

Curriculum Areas	N	%
Perceptual Skills	5	83
Academic Skills	3	50
Motor Skills	6	100
Communication Skills	5	83
Social Skills	3	50
Vocational Skills	3	50

N=6

Table 12 presents the main curriculum areas included in students' educational programs, as reported by special education teachers. Only one area, motor skills, is taught by all of the teachers surveyed. Communication skills and perceptual skills were taught by 83% of the teachers. Academic skills, social skills and vocational skills were taught by only 50% of the teachers. No teacher surveyed reported providing instruction in the areas of daily living skills, recreation and leisure skills or community skills. This data indicates a curriculum focus on very basic skills with little emphasis on functional living skills. This lack of balance in special education curricula may be indicative

of both inadequate preservice training and/or inservice training provided special education teachers. As The Ministry of Education recommends a curricula emphasis on functional living skills, the existing special education programs will require support and assistance to meet that goal.

3. Evaluation and Assessment Process: Four open-ended questions about educational assessment and diagnostic procedures were included in the special education teachers' questionnaire. The educational assessment tools that the teachers reported using are summarized in Table 13

Table 13

Educational Assessment Tools and Procedures
Special Education Teachers Reported Using

<u>Assessment Tools</u>	<u>N</u>	<u>%</u>
Frostig Developmental Test of Visual Perception	2	33%
PIEDA	1	16%
Revessal	1	16%
Gessel Developmental Scales	5	83%
Informal Teacher-Made Tests	3	50%
Systematic Observations	3	50%

N=6

The majority of the teachers (83%) reported using the Gessel Developmental Scales. Only 50% of the teachers, however, reported using systematic observations as a part of the assessment process. The quality program indicators emphasized that special education teachers should develop observations of students and observe how they function in natural environments. It should also be noted that the tool the majority of teachers used, the Gessel Scales, was developed over forty years ago to measure development in nonhandicapped infants and young children. This assessment tool is, therefore, age-inappropriate and nonfunctional for the majority of students with whom it is used.

Teachers reported having a formal interview with parents every time a new student is assessed to develop a clinical history of their child. Teachers also indicated that there are other professionals who evaluate each student (Table 14).

Table 14

Other Professionals Involved In Assessment and
Diagnostic Evaluation Students as Reported by Special
Education Teachers

Professionals	N	%
	N=6	
Psychologist	6	100%
Audiologist	6	100%
Neurologist	3	50%
Physical Therapist	2	33%
Occupational Therapist	3	50%
Language Pathologist	4	66%
Vision Specialist	2	33%

N=6

All teachers stated that each student is evaluated by both an audiologist and a psychologist. Each student is also evaluated by other specialists according to their disability (e.g., a student who presents vision problems will be evaluated periodically by a vision specialist).

4. Transdisciplinary Team Work: Special Education teachers reported working and developing educational programs with other professional involved in some manner in the school program. The assessment procedures used by the

majority of the special education teachers in this study, however, were more similar to a multidisciplinary approach than transdisciplinary methodology.

5. Parental, Family, Significant Other Involvement: The questionnaire for special education teachers included one question about the role of the parents, family, and or significant others in the development and implementation of educational programs for each student. All six teachers reported that family participation was essential not only in the development of the educational program for each student, but also in the implementation of it. They stated that without the family participation the educational goals will never be achieved, since the family and significant others are the ones who spend the most time with the student.

6. Special Education Administrators' Role in Educational Programs: There were ten five-point Likert questions in the administrators questionnaire related to their role in special education program. The role of administrators is explained in the response of research question number 1 at the beginning of the chapter.

7. Transitional Planning: Special education teachers recommended the development of more transition programs for those students who graduate from special education schools. A lack of those programs is apparent since special education teachers and teachers educators suggested in their actions to improve special education programs in

Costa Rica, the integration and implementation of transition programs into regular and special education schools.

8. Compliance with National Education Mandates: Special education teachers presented a lack of implementation of functional living skills mandated by the Ministry of Education Policies. The data indicates that teachers are focusing more in motor skills, perceptual skills, and communication skills. Functional living skills are essential in for the development of independent living skills that students need to function independently in the community.

All eight of the quality program indicators are present to some degree in special education programs in Costa Rica. Classroom teachers reported that the principal obstacles to realizing quality educational programs are a lack of instructional materials and a teacher/student ratio that is too high, in view of the fact that they do not have teacher aides to assist them.

Question # 5

What cultural differences need to be taken into account when comparing educational programs in Costa Rica with those in the United States?

Three five-point Likert scale questions concerning cultural consideration to be taken into account when comparing educational programs in Costa Rica to those in

the United States were included in the questionnaires of the three groups (Table 15). The general mean scores for the first two questions (2.92 and 2.87) reveal that participants felt that it is only somewhat true that persons who are handicapped are treated as valued members of their community and participate in all aspects of Costa Rica life. The general mean score for question three (3.78) indicates that the majority of people in Costa Rica believe that children and youth who are handicapped should receive an education. Teacher educators, once again, generated the highest mean score for all three questions.

The review of literature, informal discussions with people in special education programs, and observations reveal that there are other cultural factors which should be taken in consideration. Among them is the fact that Costa Rica has no army and all monies that would be allocated to the military goes into education. Even though the regular education services in Costa Rica are one of the best in Central America, the special education services still require more financial, organizational, and professional support in order for them to be effective and successful. Another cultural factor is that special education teachers, administrators, and teacher educators suggested that the fact that a student is from provinces (Limón, Guanacaste, Puntarenas, Heredia, Alajuela, and Cartago) or from the San José needs to be taken into consideration when offering services. This is due to the

fact that: 1) people from rural areas have less available educational resources, 2) transportation is sometimes more difficult to acquire, and 3) each province has its own cultural values and traditions. When the teacher and other professionals assess the student, she or he needs to take in consideration the community and the province where the student lives. Teachers have to be aware of the different cultural, familiar, and individual necessities of each student.

Table 15

An Assessment of Costa Rican Cultural Variables by
Special Education Teachers, Teacher Educators, and Administrators.

Questions	Group 1 N=6 Mean	Group 2 N=5 Mean	Group 3 N=3 Mean	General Mean
1. Persons who are handicapped are treated valued members of their community.	3.0	3.20	2.33	2.92
2. Persons who are handicapped participate in all aspects of Costa Rica life.	3.0	3.40	2.33	2.87
3. Most people in Costa Rica believe that children and youth who are handicapped should receive an education.	3.33	4.40	3.66	3.78

Group 1= Special Education Teachers

Group 2= Teacher Educators

Group 3= Administrators

1= Definitely Not True

2= Between Definitely Not True/Somewhat True

3= Somewhat True

4= Between Somewhat True/Definitely True

5= Definitely True

Costa Rican people are very educated. Ninety-three percent of its population knows how to read and write. The education of the people and the development of new programs is of great importance to the government. That is the reason for the development of special education policies that insure every person in the country who needs special education will receive it.

Participants in the study revealed that the attitudes of Costa Ricans about persons who are handicapped are changing. As a result of the new programs emphasizing integration and normalization, the people in the communities are more used to helping; sharing things, and learning together with persons who are handicapped. For example, the regular education schools serve students who need special education in regular classes where the students are educated together, play together, and learn that the persons who have special needs can also be good friends. Thanks to these educational programs and the integration the students with special needs, people in their communities are learning to not only admire and respect persons with handicaps, but they are also learning that people with handicaps can be valuable and productive members of the community.

The questionnaires included two questions about what participants would do to improve special education services in Costa Rica. The participants in the three groups reported the following main actions:

Special Education Teachers

1. Give more support to developing and maintaining special education services around the country.

2. Increase special education teachers' salaries to attract more persons to the field.

3. The communication and organization processes of the national special education organizations should be more effective to keep professionals and other people involved in the field more informed about the changes, improvements, and activities that occur around the country.

4. More input from private organizations has to occur to evoke improvement of the field. The government should stop being the only national provider to special education programs.

5. More financial support is needed to develop new programs, new assessment tools, new educational materials, and to carry on with the main goals of integration and normalization of students in special education programs.

Teacher Educators

1. New research centers needed to be developed that will assist in the improvement and awareness of special education services around the country.

2. National and international level special education conferences, conventions, and other kinds of informational processes should be promoted to not only keep professionals, parents, and other persons informed and involved in the field in Costa Rica, but also to make what

is being done in Costa Rica known around the world .

3. Private and public special education organizations need to work cooperatively to interchange educational and organizational concerns.

4. Professional awareness of how important it is to include vocational and community-based programs in special education must be increased to promote independence among students who are handicapped.

5. The detection and referral services needed to be improved to give the best possible special education services to all students who needed it.

6. Public awareness should be increased (by using media, newspapers, and other public and private means of communication) concerning the policies, programs, and new special education activities carried on in the communities.

Administrators

1. Special education programs need more trained teachers to satisfy the needs of all students in the country.

2. More transportation services need to be provided for students who cannot get to school because of the lack of them.

3. More community activities should be developed with the objective of raising monies necessary to increase teachers' salaries, buy books and other educational materials needed in the schools, and generate new and better ideas to improve the services.

In the analysis of the educational concerns from the three groups, it was noted that the idea of increasing teachers' salaries was most repeated by the professionals.

Question # 6

What would be the major components or characteristics of a quality special education school in Costa Rica that serves children and youth with handicaps?

Taking into consideration the quantitative and qualitative information from questionnaires, observations, interviews, and the review of the literature, the major school components fall within the following 8 categories:

1. Teacher Preparation (Pre-service and Inservice Training).
2. Educational Assessment of Students.
3. Curriculum Development.
4. Material Acquisition.
5. Use of Support Services.
6. Parent, Family, Significant Others Involvement.
7. Community Involvement.
8. Staff Recruitment and Teachers Job Requirements.
9. Administrator's Role.

1. Teacher Preparation: Preservice and inservice training of teachers is essential for quality educational services. Inservice training and program visitations should be made available to faculty and staff. To offer

quality and effective special education services, teachers and staff members must also be well trained in the areas in which they will offer services.

Inservice training is essential. At least once a month the director should bring another professional in to give a conference or share new ideas important in the educational area addressed. If the director is unable to bring another person, other activities that could promote improvement and up-dated special education programs will be conducted.

2. Educational Assessment of Students: Assessments utilized in the school will be functional, chronological age-appropriate ones that reflect transitions needs. Functional assessments have specific goals and objectives that describe each skill that the student will need to be more independent. Parental, family, and or significant other participation in the assessment process and the development of educational programs is essential. On the other hand, the student's teacher also plays a key role as the person most familiar with the child's educational program, along with other professionals who are part of special education program.

3. Curriculum Development: Each student's composite program must address major areas of educational concern that include both categorical areas and functional domains. Functional living skills addressed under the functional domains stress the abilities required for participation in activities that naturally occur in home

and community environments. They include:

1. Domestic Skills (e.g., food preparation; laundry; housekeeping; yard care; personal hygiene; grooming; dressing).
2. Community Functioning Skills (e.g., using public transportation; eating at a restaurant; shopping; attending church).
3. Vocational Skills (e.g., doing household chores; busing tables at a restaurant; sorting envelopes at the Post Office; folding towels at a hotel).
4. Recreation and Leisure Skills (e.g., listening to music; playing at the park; going to the movies; swimming at the beach).

Categorical areas of concern should be taught within functional activities, not during isolated activities. They include:

1. Fine and Gross Motor Skills.
2. Perceptual Motor Skills.
3. Self-Help Skills (e.g., eating; drinking; dressing; grooming; toileting; and personal hygiene).
4. Communication Skills.
5. Cognitive Skills (including functional academics).
6. Social Skills.

Instructional arrangements should include:

1. One-to-one instruction (e.i., the teacher working with only one student).

2. Small group instruction (e.g., the teacher working with two to three students at the same time).

3. Large group instruction (e.g., the teacher working with five or more students at the same time).

For those students who have mild to moderate handicaps, teachers should focus on academics skills, with some training in functional living skills. Students with severe/multiple disabilities, on the other hand, should have an educational focus on functional living skills with some training in functional academic skills.

4. Material Acquisition: Teachers should use materials that are meaningful for the students. They should utilize natural materials with the students that are more likely to be encountered in environments where students live, work, and play. Materials should be provided by the school. If teachers need specific materials, they should talk to the director to see if they can be provided.

Teachers should take into consideration the following aspects when selecting educational materials:

1. Select materials that challenge the student.
2. Select materials that encourage active participation on the part of the student.
3. Select material that are age-appropriate for the student.

5. Use of Support Services: Administrators need to provide support services to teachers, professionals, and parents. The school would operate with a transdisciplinary

approach to provide the best services to students and their parents. Professionals involved in some manner with the education and improvement of each of the students, must work cooperatively with each other. Teachers should have the knowledge of how to work as a team that includes parents, speech therapists, physical therapists, occupational therapists, psychologists, teacher aides, and other support personnel.

Depending on the needs of each students and their families, the school would provide specialized support personnel to attend those needs (e.g., speech therapist; psychologist; family counselor; nurse; social worker; physical therapist) to participate in the educational program of the students.

6. Parents, Family, Significant Others Involvement: Teachers should include parents, siblings, and significant others in the development of the educational programs for each student. Their perspectives and input are essential in the educational progress. Teachers must identify family priorities for training and design acceptable strategies to help not only the student, but also his or her family members acquire needed skills.

7. Community Involvement: In order for the students to perform the variety of skills required across community environments, instruction must occur in those environments. Teachers should take into consideration the following aspects, when determining community environments for

teaching:

1. Environments that are frequented by the student and his or her family.
2. Environments that are frequented by nonhandicapped peers of the same age.
3. Environments that involve skills that would be required in the largest number of other community environments.

The integration of students with handicaps is crucial to the development of skills needed to perform and interact with their nonhandicapped peers. Integration facilitates students' learning about and from each other, increasing their understanding of individual differences, and developing and maintaining new friendships.

The school should develop community activities to raise funds that will help in its financial support (raffles, dinners, parties). With that money the school could increase salaries, buy new educational materials, and other school necessities.

8. Staff Recruitment and Teachers Job Requirements:
Teachers must have at least a bachelors degree in special education to work with the students. It is essential that each teacher has specialized knowledge in the services that she or he will provide. For example, if the teacher will be working with students with emotional and behavioral problems, he or she should know behavioral management techniques that will help him or her to control the

students.

Job descriptions for teachers, teacher aides, and all staff involved in the school should be available. The expectancies for performance should be outlined in those job descriptions. In addition, there should be quality performance indicators developed for personnel upon which they will be evaluated. All this information should be provided in the beginning of their employment. The director of the school should visit teachers' classrooms on an ongoing basis to become familiar with the performance of faculty and staff.

9. Administrator's Role: The school administrators should execute the following actions:

1. Keep school personnel informed of the new programs, regulations, rules, or changes that will create a change or affect the school programs.

2. Develop weekly meetings to discuss information about the school and develop a team decision making process.

3. Promote activities that foster good interpersonal relations and job satisfaction between employees (e.g., staff news letter; staff member of the month; secret friends).

4. Uphold and advance the values, ethics, knowledge and mission of the profession in special education.

5. Support the faculty and staff in the development of research studies that will improve the special education services offered by the school.

The administrator should have a mission statement of the school that every parent, family member, student teacher, and other members of the school should read. The mission statement of the school would be developed by the administrator and faculty, their vision of what is required to improve the special education field and offer the best of services to those children and youth who needed. A sample of a mission statement for the proposed school is shown in Figure 3.

Figure 3. Mission Statement of The Proposed School.

EDUCATIONAL CENTER FOR EXCEPTIONAL CHILDREN
MISSION STATEMENT

Our mission is to fulfill the needs and wants of students who are handicapped who deserve the best from us. As special educators in a transdisciplinary team, we have the responsibility to demonstrate that children with disabilities have the right to develop their potential, enjoy the wonderful things that are around them, and be the independent and productive persons that a healthy society needs.

* Children with handicaps are people first who deserve the best from our services.

* Our purpose is to provide children with handicaps a high quality educational programs so that they can become skillful and independent individuals.

* In this school we are together to share mutual values, beliefs, and dreams to fulfill our purpose.

* ECEC is an interdisciplinary organization which welcome new ideas, research studies, and transformational thoughts that will improve our society.

* ECEC is a place where warmth and kindness are shared, concern and care are shown, and uniqueness is encourage.

* ECEC is a place where joy and laughter are welcome, memories are made, dreams are dreamed, and friendship is always a guest.

* We will enhance parental and family involvement in each of our programs.

* We expect honesty, courage, generosity, integrity, fairness, and prudence in each of our members. We are committed to an ethical approach when we deliver and practice our services.

CHAPTER FIVE

Conclusions and Recommendations

Introduction

Six research questions were analyzed to accomplish the purpose of this study. A review of literature was conducted to identify program indicators necessary to develop the questionnaires and to design a special education school in Costa Rica. Three different kinds of questionnaires (Appendixes A, B, C) were developed: for administrators, for teachers educators, and for special education teachers. The questionnaires were designed to obtain demographic information, and to obtain information on aspects of services that are indicative of quality special education programs. A sample of 14 participants (3 administrators, 5 teacher educators, and 6 special education teachers) was utilized in the study. The information gathered from the questionnaires and the review of the literature was used to assess the special education services in Costa Rica and to design a special education school. The results of this research study will now be discussed.

Organizational Structure of Special Education

Administrative Services in Costa Rica

The administrative structure of the Department of Special Education in Costa Rica was analyzed in Chapter IV. This organizational structure was designed in a way that all its members work as a team. Even though the organization has rules, regulations, and norms that all members need to follow, its decision making process is developed as a group activity. The organization is responsible for the administration of all the public special education services in the country. The director works with main subdirectors who, in turn, have advisors. The delegation of responsibility is clear and well structured. Formal and informal meetings are coordinated to develop plans, solve problems, and make decisions.

A different kind of decision making process was observed when comparing private and public organizations. Public organizations, such as the Special Education Department of Costa Rica, organized people and resources focusing on the organizations goals, rules, regulation, and standard operating procedures. Private organizations, however, were less worried about rules and regulations, and more concerned with who their members were, what resources they might use, and how well they were able to work together to satisfy students' needs.

The information from the questionnaires revealed that

the school administrators are involved in critical school activities, to varying degrees. For example, it was noted that administrators provided educational materials once a year, as opposed to monthly; as recommended by Podemski et al (1984). This information substantiates the teachers' concern over the lack of curriculum materials. On the other hand, school administrators demonstrated that they maintain active contact with the parents, families and significant others of the students, on an ongoing basis

Five different narrative answers were given by administrators in relation to their main role in their school. One of the most repeated answers was about hiring and managing personnel. The administrators agreed that their primary role was to see that the special education policies mandated by the Ministry of Education and Special Education Department are being implemented and followed by the school personnel.

The administrators in this study presented limited experience (mean=1.35 years) working with students who are handicapped. They demonstrated knowledge about the main aspects and needs of the students, however. Their roles as school administrators were appreciated by many teachers interviewed and sampled in the study.

Characteristics of Special Education
Services In Costa Rica

The Ministry of Education, Department of Special Education developed special education policies to protect and serve children and youth who are handicapped. Ten different sections were addressed to explain the policies: 1) family and community; 2) prevention; 3) detection, evaluation, and diagnosis; 4) administration; 5) curriculum; 6) formation, training, and improvement in special education; 7) coordination; 8) investigation; and 9) publication. These policies were developed based on the ideas of P.L. 94-142.

Two main universities (U.C.R and U.N.A) offer bachelors degree in special education. The U.C.R. also offers a masters degree in integral rehabilitation. All the participants, but one, had a degree from the U.C.R. Teachers educators surveyed reported having an average of 14.1 years of experience working in special education programs. Special education teachers surveyed had an average of 3.5 years of special education experience.

Twelve questions about special education services in Costa Rica were analyzed. Teacher educators believed that the majority of children who are handicapped were receiving special education, whereas special education teachers disagree with that observation. The three groups of participants agreed that Costa Rica offers quality

special education services compared to Europe, North America, and Latin American countries. The three groups further agreed that special education teachers were not well paid in comparison with regular education teachers.

Teacher educators indicated that they believed students who are handicapped received quality educational services. Teacher educators and administrators, however, considered the special education services afforded students to be only average. A difference in the range of scores from teacher educators and from special education teachers and administrators was noticeable through out the data analysis. One of the reasons for this might be that special education teachers and administrators are more involved and expend more time in schools with students, other teachers, and other professionals than do teacher educators. Subsequently, they might have different opinions about what is really happening in Costa Rica.

The questionnaires included a narrative question about the major actions that participants would take to improve the special education services in Costa Rica. Table 16 summarizes the participants' major responses to this question.

Table 16

Major Actions Recommended By Teachers, Teacher
Educators, and Administrators to Improve Special Education
Services In Costa Rica

Major Actions	Group 1 N=6		Group 2 N=5		Group 3 N=3	
	N	%	N	%	N	%
1. Increase teacher salaries.	6	100%	5	100%	3	100%
2. Increase financial support to all special education services.	6	100%	4	80%	2	67%
3. Promote more communication between special education organizations.	5	83%	4	80%	1	33%
4. Develop research groups.	5	83%	2	40%	1	33%
5. Increase integration and coordination of new special education policies and other related services.	5	83%	3	60%	1	33%
6. Improve detection and referral services in the communities.	6	100%	1	20%	1	33%
7. Keep informed people from the community about special education services.	4	67%	4	80%	2	67%
8. Develop more transition programs for all students in special education programs	6	100%	1	20%	0	0%

Group 1= Special Education Teachers

Group 2= Teacher Educators

Group 3= Administrators

The three groups agreed that the salaries of special education teachers needed to be increased, since they often needed two jobs to make a living. Teachers educators and special education teachers also believed that the lack of financial resources was effecting the development of new programs and the improvement of existing programs. Teachers were more concerned with the development of research studies that informed people about special education, than were teacher educators or administrators. Teachers also perceived a need for improved detection and referral services and enhance transitions services that were not recognized by teacher educators and administrators. Both teachers and teacher educators saw a need for increased communication and cooperation between educational professionals and organizations that was not perceived by administrators.

In informal interviews, teachers argued that there are outstanding special education programs developing in the communities around Costa Rica. Very few of the professionals in the field, however, were reported by teachers as being informed about what is happening and who are the people who are implementing those educational programs.

The special education services in Costa Rica are passing through a period of change and improvement. This process started in 1986, when all the parents, teachers, and professionals in the field evaluated the system to

identify the main problems that they were facing. The primarily goal of this change process is the integration and normalization of all special education services in the country. This process will take time and effort from all of the private and public schools, teachers, parents, and professionals in the field. The most important aspect of this process is to make key persons more aware of weaknesses in existing services and to, subsequently, improve those services. Organizations of parents with exceptional children have become more active and interested in learning and improving their children's education. Because they are more aware and informed about international organizations of parents with persons who need special education (e.g., the Council for Exceptional Children), parents now demand better and more appropriate education for all exceptional people. The participation of parents in the educational planning for their child is essential, as it is indicated in the Special Education Policies mandated by the Ministry of Education.

Teacher training programs in Costa Rica are also improving. In the past years the special education teaching programs were more specific to each area. For example, the universities had programs for mental retardation, for learning disabilities, and other specific areas. After learning that Costa Rica had a more heterogeneous special education population and that the teachers graduated were not trained to give all the require services, they changed

the university programs in special education to more generic training, so that they could offer services to all the students who needed it.

Special education teachers reported that the special education services in Costa Rica are improving but that they need time and a great effort from the government, private and public special education programs, parents' organizations, and other professional organizations to really carry out the main goals of the special education policies. They also reported that financial support is vital in order for special education services to be improved. The teachers' salaries are so poor that the number of persons pursuing a career in the field of special education has decreased over the years. In order for teachers to have a decent salary that at least pays their main bills (e.g., food; rent; gasoline), they typically need two jobs: one in the morning (as a school teacher), and one in the afternoon working in private special education clinics, where they offer individualized therapy for students.

The special education services offered in Costa Rica serve as very good example for other Latin American countries. For example, the government of Costa Rica is helping in the development of special education services in Nicaragua. They are using professionals in the field of special education to give training to other Nicaraguan professionals. This effort to help neighboring countries

makes Costa Rica organize its own special education services, improve ways of offering services, and as a result, help the persons who are handicapped and their families to live better lives.

Quality Special Education School

The major components of a quality special education school were indicated in Chapter Four. The major aspects of the school are based on teacher preparation (preservice and inservice training), comprehensive students educational assessment of students, functional curriculum development, material acquisition, use of support services, transdisciplinary teamwork, and community involvement. A special school can only be successful if these seven educational aspects are taken into consideration. If they are, it can be a success not only for the students, teachers, and professionals involved in the school, but also for those persons involved in the community and in the field of special education at large. The main goal of the proposed school is to address the needs of children and youth who are handicapped in Costa Rica. It will involve any persons who are interested in accomplishing this goal. The school, as was previously stated, would offer new methodologies and services to professionals in the field and, subsequently, help to improve educational services to students who are handicapped across Costa Rica. It would stress the importance of the implementation of the special

education policies mandated by the Costa Rican Ministry of Education and The Department of Special Education.

This research study demonstrates that not only the students with handicaps are needing new and better services, but also that parents, teachers, administrators, teacher educators, support personnel, and people in the community need to work cooperatively and enthusiastically to implement new and better ideas that would help to create satisfactory services. Transdisciplinary teamwork is an extremely critical factor.

Suggestions and Recommendations

This study reported that the special education services in Costa Rica are a clear example for other countries around the world. Costa Rica, however, has many educational aspects that require action. Recommendations include the following:

1. Administrators need to be more involved in the development and implementation of educational programs for students.

2. Administrators should increase the amount of inservice training not only to persons that present a low level of experience working in special education programs, but also to teachers and other professionals who are involved in those educational programs.

3. Administrators, teachers, professionals, parents and families should work cooperatively to inform communities about school programs and activities.

4. Preservice programs presented a high quality special education content, however, special education teachers are not using what they are learning in the real environments. Teacher educators should ensure that all future teachers apply what they learn at the university with students who are handicapped, prior to their graduation.

5. Special education teachers should develop more curricula that emphasize chronological-age-appropriate, functional activities, and a detailed daily schedule.

6. Special Education programs should develop more transition programs to prepare students for graduation.

7. The use of a multidisciplinary approach should be phased out from all special education programs. The use of a transdisciplinary approach that focuses on instruction and development of functional skills within practical activities across the natural environments in which the activities naturally occur should be increased.

8. Special education teachers should stop using the Gessel Developmental Scale, since it is a tool that was designed for American children. It is also an old, inappropriate assessment tool which does not focus on students' typical, spontaneous behaviors that occur in natural environments. Current, age-appropriate assessments that focus on functional skills pertinent to the Costa

Rican culture should be used instead.

9. Longitudinal plans should be developed for each student in special education programs to promote transition plans and life span services.

10. Salaries of special education teachers should increase to benefit not only the teachers, but also the field of special education. More new teachers are extremely needed in this country.

11. Subscriptions to journals and memberships in national and international organizations should be promoted by private and public schools, universities, and libraries. Up-dated information should be available for all people involved, not only in special education, but also in regular education.

12. Special education policies are not fully integrated into the educational programs in the country. Administrators, teacher educators and special education teachers should follow in a detailed manner each of the special education policies that the Ministry of Education mandates.

13. Research studies about the special education programs in Costa Rica should be promoted, not only nationally, but internationally.

14. Research studies should be developed in the area of educational assessment to develop new and better diagnostic tools that are cultural appropriate for students in Costa Rica.

15. Research studies should be developed to analyze whether integration and normalization processes are being effective around the country and if the special education policies mandated by the Ministry of Education are being implemented.

Recommendations For Further Study

This study utilized three different groups of professionals involved in special education. A major recommendation made, as a result of this study, concerned the preservice and inservice training of special education teachers. Further studies are necessary to determine the degree to which special education teachers around the country are receiving quality preservice and inservice training that will help them to offer effective educational services.

This study could not develop generalizations about the findings, because of the limited sample size. Further studies are recommended with a sample size that is not only large enough to make generalizations, but also representative of the population studied.

Information about special education programs in San José, Costa Rica was reported in this study. However, further studies are suggested to assess the special education services and needs in the provinces of the country. Persons interested in developing similar studies should take into consideration that one of the limitations

of this study was that the researcher was a Mexican person. The information gathered in this study could not be 100% reliable, since participants in this study might have found difficult to express their ideas about their country to a foreign person.

Finally, the questionnaires utilized in this study were developed to obtain information from professionals in Costa Rica. It is recommended, however, that other interested professionals utilize the questionnaires to investigate the special education services provided in other Latin American countries. Further studies like this one are extremely needed in not only Latin American countries, but around the world.

REFERENCES

- Abeson, A., & Zettler, J. (1977). The end of the quiet revolution: The education for All Handicapped Act of 1975. Exceptional Children, 44(2), 114-128.
- Aptekar, L. S. (1983). Suggestions for providing services to the handicapped in Latin America. World Development, 11(2), 15-26.
- Araya, P. C., Alfaro, R., & Hall, C. (Eds.). (1981). Crisis en Costa Rica [Crisis in Costa Rica]. San Jose, Costa Rica: Cuadernos Centro Americanos de Ciencias Sociales.
- Ashcroft, S. (1984). Research on multimedia access to microcomputers for visually impaired youth. Education of the Visually Handicapped, 15(4), 108-118.
- Aveno, A. & Renzaglia, A. (1988). A survey of attitudes of potential community training site staff toward persons with severe handicaps. Educating and Training in Mental Retardation, 23(3), 213-227.
- Barraga, N. (1983). Visual handicaps and learning. Austin, TX: Exceptional Resources.
- Bateman, B. (1964). Learning disabilities - Yesterday today, and tomorrow. Exceptional Children, 31, 167-176.
- Behrmann,, M. (1984). Handbook of microcomputers in special education. San Diego, CA: College-Hill Press, Inc.
- Bennis, W., & Nanus, B. (1985). Leaders: The strategies taking charge. New York: Harper and Row.
- Benveniste, G. (1983). Bureaucracy. San Francisco, CA: Beyond & Fraser.
- Bigge, J. L. (Ed.). (1982). Teaching individuals with physical and multiple disabilities. Columbus, OH: Charles E. Merrill.
- Blacher, J. (Ed.). (1984). Severely handicapped young children and their families: Research in review. New York: Holt, Rinehart & Winston.

- Bloom, L., & Lahey, M. (1978). Language development and language disorders. New York: John Wiley & Sons.
- Bolman, L. G., & Deal, T. E. (1984). Modern approaches to understanding and managing organizations. San Francisco, CA: Jossey-Bass.
- Borg, R. W., & Gall, M. D. (1983). Educational research (4th ed.). New York: Longman.
- Brady, M., & Dickson, P. (1983). Microcomputer communication game for hearing-impaired students. American Annals of the Deaf, 128, 835-841.
- Bricker, D., & Filler, J. (Eds.). (1985). Severe mental retardation: From theory to practice. Reston, VA: Council for the Exceptional Children.
- Browder, D. M., Snell, M. E., & Wildonger, B. A. (1988). Simulation and community-based instruction of vending machines with time delay. Education and Training in Mental Retardation, 23(3), 175-185.
- Brown, L., Ford, A., Nisbet, J., Sweet, M., Donnellan, A., & Guenewald, L. (1983). Opportunities available when severely handicapped students attend chronological age appropriate regular schools. Journal of the Association for the Severely Handicapped, 8, 16-24.
- Buffer, L. C. (1980). Recruit retired adults as volunteers in special education. Teaching Exceptional Children, 12(3), 113-115.
- Burns, J. M. (1978). Leadership. New York: Harper & Row.
- Cegelka, P. T., & Prehem, H. J. (1982). Mental retardation: From categories to people. Columbus, OH: Charles E. Merrill.
- Certo, N., Haring, N., & York, R. (1984). Public school integration of severely handicapped students. Baltimore, MD: Paul H. Brookers.
- Connors, C., & Werry, J. (1979). Pharmacotherapy. New York: Wiley Inc.
- Cook, T. D., & Reichardt, C. S. (Eds.). (1979). Qualitative and quantitative methods in evaluation. Beverly Hills, CA: Sage.

- Corn, A., & Martinez, I. (1978). When you have a visually handicapped child in your classroom: Suggestions for teachers. New York: American Foundation for the Blind.
- Costa Rica Ministry of Education. (1982). Education in Costa Rica. San Jose, Costa Rica: Costa Rican Government Printing Office.
- Davis, H., & Silverman, S. R. (1978). Hearing and deafness. New York: Holt, Rinehart and Winston.
- Dickson, S. (1974). Communication disorders. Glenview, IL: Scott. Foresman and Company.
- Edelman, M. (1983). Recent literature on Costa Rica's economic crisis. Latin American Research Review, 18, 166-180.
- Falvey, M. A. (1986). Community-based curriculum. Baltimore: Paul H. Brookes.
- Filler, J. W. (1982). Service models for handicapped infants. In R. Dubose, & S. G. Garwood (Eds.). Educating handicapped infants (pp. 106-121). San Francisco: Jossey-Bass.
- Firestone, W. A. (1987). Meaning in method: The rhetoric of quantitative and qualitative research. Educational Researcher, 16, 16-20.
- Foster, J. C., Szoke, C. O., Kapisousky, P. M., & Kriger, L. S. (1981). Guidance, counseling, and support services for high school students with physical disabilities. Cambridge, MA: Technical Education Research Centers.
- Foster, W. F. (1986). Paradigms and promises. Buffalo, NY: Prometheus Books.
- Fredericks, H., & Staff of the Teaching Research Infant and Child Center. (1980). The teaching research curriculum for moderately and severely handicapped. Springfield, IL: Charles C. Thomas.
- Garretson, M. D. (1976). Total communication. Volta Review, 78(4), 88-95.
- Gearheart, B. R., & Litton, F. W. (1975). The trainable retarded. St. Louis: Mosby.

- Gerhardstein, M. (1980). Assessing the multi-handicapped child: Legal mandates, organizational issues, and problems. In J. N. Murray (Ed.), Developing assessment programs for the multi-handicapped child (pp. 3-38). Springfield, IL: Charles C Thomas.
- Goldberg, I. I. (1972). Attitudes toward the handicapped: A comparison between Europe and the United States. Columbus, OH: Charles E. Merrill.
- Grossman, H. J. (1983). Classification of mental retardation. Washington, DC: American Association on Mental Deficiency.
- Guba, E. G., & Lincoln, Y. S. (1981). Effective evaluation. San Francisco, CA: Jossey-Bass.
- Hall, C. (1985). Costa Rica. Bowel, CO: Westview Press.
- Hallahan, D. P., & Kauffman, J. M. (1982). Exceptional children. Englewood Cliffs, NJ: Prentice-Hall.
- Hansen, C. L. (Ed.). (1982). Severely handicapped students in the community. Seattle: University of Washington, Program Development Assistance System.
- Hammer-Nietupski, S., Nietupski, J., Bates, P., & Maurer, S. (1982). Implementing a community-based educational model for moderately and severely handicapped: Common problems and suggestions. Journal of the Association for the Severely Handicapped, 7(2), 38-43.
- Haring, N. G. (1975). Educational services for the severely and profoundly handicapped. Journal of Special Education, 9(4), 425-433.
- Haring, N. G. (1986). Introduction. In N. G. Haring, & L. McCormick, Exceptional children and youth (pp. 1-39). Columbus, OH: Charles E. Merrill.
- Haring, N. G. & Billingsley, F. F. (1984). Systems change strategies to ensure the future of integration. In N. Certo, H. Haring, , & R. York (Eds.), Public school integration of severely handicapped students: Rational issues and progressive alternatives (pp. 83-105). Baltimore: Paul H. Brookers.
- Haring, N. G., & McCormick, L. (1986). Exceptional children and youth. Columbus, OH: Charles E. Merrill.

- Haring, N. G., & York, R. (Eds.). (1984). Public schools integration of severely handicapped students: Rational issues and progressive alternatives. Baltimore: Paul H. Brookes.
- Harris, G. A. (1982). Preparation of special education administration. Danville, IL: Charles C. Thomas.
- Hedrick, E. P., Prather, E. M., & Tobin, A. (Eds.). (1984). Sequence inventory of communications development. Seattle: University of Washington Press.
- Hewett, F. (1980). Behavioral ecology: A unifying strategy for the 80s. In R. Rutherford, A. Prieto, & J. McGlothlin (Eds.), Severe behavior disorders of children and youth (pp. 239-252). Phoenix, AZ: Arizona State University.
- Hobbs, N. (1975). The futures of children. San Francisco: Jossey-Bass.
- Howe, E. C. (1981). Administration of special education. Denver, CO: Love Publishing Co.
- Huck, S. W., Cormer, W. H., & Bounds, W. G. (1974). Reading statistics and research. New York: Harper & Row.
- Hutchison, D. J. (1974). A model for transdisciplinary staff development. New York: United Cerebral Palsy Association.
- Iglesias, E. (1977). Balance economico Latino americano [Latin American economic balance], Brevlaro, 1, 15-25.
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. Administrative Science Quartely, 24(4), 602-611.
- Kauffman, J. M. (1981a). Characteristics of children's behavior disorders (2nd ed.). Columbus: Charles E. Merrill.
- Kauffman, J. M. (1981b). Historical trends and contemporary issues in special education in the United States. In J. M. Kauffman, & D. P. Hallahan (Eds.), Handbook of special education (pp. 3-55). Englewood Cliffs, NJ: Prentice-Hall.

- Kelly, L. J. & Vergason, G. A. (1978). Dictionary of special education. Denver, CO: Love Publishing.
- Kerr, M., & Nelson, C. (1983). Strategies for managing behavior problems in the classroom. Columbus, OH: Charles E. Merrill.
- Kirk, S. A., & Bateman, B. (1962). Diagnosis and remediation of learning disabilities. Exceptional Children, 29(3), 73-78.
- Kirk, S. A., & Chalfant, J. (1984). Academic and developmental disabilities. Denver: Love.
- Kirk, S. A., & Gallagher, J. J. (1986). Educating exceptional children. Boston, MA: Houghton Mifflin.
- Kirk, S. A., & Gallagher, J. J. (1983). Educating exceptional children. Boston, MA: Houghton Mifflin.
- Kirk, S. A., & Gallagher, J. J. (1979). Educating exceptional children. Boston, MA: Houghton Mifflin.
- Lane, H. (1976). The wild boy of Aveyron. Cambridge, MA: Harvard University Press.
- Langley, M. B. (1980). Functional vision inventory for the multiple and severely handicapped. Chicago: Stoelting.
- Lerner, J. (1985). Learning disabilities: Theories, diagnosis, and teaching strategies. Boston: Houghton Mifflin.
- Lietz, J. J., & Towle, M. (1982). The elementary principal's role in special education. Danville, IL: Charles C. Thomas.
- Ling, D. (1976). Speech and the hearing-impaired child: Theory and practice. Washington, DC: The Alexander Graham Bell Association for the Deaf.
- Ling, D., & Ling, A. H. (1978). Aural habilitation. Washington, DC: The Alexander Graham Bell Association for the Deaf.
- Livingston, R. (1986). Visual Impairments. In N. G. Haring, & L. McCormick, Exceptional children and youth (pp. 397-429). Columbus, OH: Charles E. Merrill.

- Long, N., Morse, W., & Newman, R. (Eds.). (1980). Conflict in the classroom: The education of emotionally disturbed children (4th ed.). Belmont, CA: Wadsworth.
- Lowenfeld, B. (Ed.). (1973). The visually handicapped child in school. New York: John Day.
- Luftig, R. L. (1988). Teaching the mentally retarded student: curriculum, methods, and strategies. Educating and Training in Mental Retardation (CEC), 23(2), 156-158.
- Maloney, T., & Murphy, M. (Eds.). (1978). The project LEARN handbook: Environmental considerations for the severely multiply handicapped orthopedically impaired's educational setting. Laurence, KS: The University of Kansas, Bureau of Child Research.
- Mayer, L. C. (1982). Educational administration and special education. Los Angeles, CA: Allyn & Bacon Inc.
- McCarthy, E. F., & Sage, D. D. (1985). Envolving organizational structures in special education. Indianapolis, IN: Council of Administrators of Special Education Inc.
- McCormick, L. (1986). Communications disorders. In N. G. Haring, & L. McCormick, Exceptional children and youth (pp. 201-231). Columbus, OH: Charles E. Merrill.
- McCormick, L., & Goldman, R. (1979). The transdisciplinary model: Implications for service delivery and personnel preparation for the severely and profoundly handicapped. AAESPH Review, 4(2), 152-161.
- McKinney, J. D. (1984). The search for subtypes of learning disability. Journal of Learning Disabilities, 17(2), 43-50.
- MacMillan, D. L. (1982). Mental retardation in school and society. Boston, MA: Little, Brown and Company.
- Meadow, K. (1980). Deafness and child development. Berkeley, CA: University of California Press.
- Mercer, C. D. (1983). Students with learning disabilities. (2nd ed.). Columbus, OH: Charles E. Merrill.

- Mercer, C. D., Hughes, C., & Mercer, A. R. (1985). Learning disabilities definitions used by state education departments. Learning Disability Quarterly, 8(1), 45-55.
- Mercer, C. D., & Mercer, A. R. (1985). Teaching students with learning problems. Columbus, OH: Charles E. Merrill.
- Mercer, C. D., Hughes, C., & Mercer, A. R. (1985). Learning disabilities definitions used by state education departments. Learning Disabilities Quarterly, 8(1), 45-55.
- Moore, D. (1982). Educating the deaf: Psychology, principles, and practices (2nd ed.). Boston: Houghton Mifflin.
- Morris, R. J., & Blatt, B. (1986). Special education: Research trends. New York: Pergamon Books.
- Moyer, K. L. (1982). Four steps to effective community involvement. Educational Leadership, 39(4), 285-287.
- Mullins, G. B. (1979). A teacher's guide to management of physically handicapped students. Springfield, IL: Charles C. Thomas.
- Myklebust, H. R. (1963). Learning disorders: Psychoneurological disturbances in childhood. Rehabilitation Literature, 25, 354-359.
- Myers, P. I., & Hammill, D. D. (1982). Learning disabilities. Austin, TX: Pro-Ed.
- Nance, W. E. (1976). Studies of hereditary deafness: Present, past, and future. Volta Review, 78(4), 6-11.
- Naremore, R. C. (1980). Language disorders in children. In T. J. Hixon, L. D. Shciberg, & J. H. Saxman (Eds.), Introduction to communication disorders. (pp. 322-402). Englewood Cliffs, NJ: Prentice-Hall.
- National Advisory Committee on Handicapped Children. (1968). First Annual Report, for the Handicapped Children. Washington, D.C.: U.S. Office of Education.

- Patterson, J. L., Purkey, S. C., & Parker, J. V. (1986). Productive school systems for a nonrational world. Alexandria, VA: Association for Supervision and Curriculum Development.
- Patton, J. R., & Payne, J. S. (1986). Mild mental retardation. In N. G. Haring, & L. McCormick, Exceptional children and youth (pp. 233-269). Columbus, OH: Charles E. Merrill.
- Payne, J. S., Patton, J. R., Kauffman, J. M., Brown, G. B., Payne, R. A. (1983). Exceptional children in focus. Columbus, OH: Charles E. Merrill.
- Pfeffer, J. (1983). The ambiguity of leaders. In Perspectives on behavior in organizations (pp. 232-253). New York: McGraw-Hill.
- Podemski, R. S. (1984). The principal's responsibility for the education of handicapped. In Kaiser, J. (Ed.), The principalship (pp. 358-402). Minneapolis, MN: Burges Publishing.
- Podemski, R. S., Price, J. B., Smith, T. E., & Marsh, G. E. (1984). Comprehensive administration of special education. Rockville, MD: Aspen Systems.
- Rosen, M. Clark, G. R., & Kivitz, M. S. (Eds.). (1975). The history of mental retardation. Baltimore: University Park Press.
- Rosenberg, M. (1980). Las luchas por el seguro social en Costa Rica [The efforts for the social security in Costa Rica]. San Jose, Costa Rica: Editorial Costa Rica.
- Rost, J. C. (1988). The nature of leadership in the postindustrial era. Paper presented at a meeting of Educational Leadership Researchers, Greenboro, NC.
- Sailor, W., & Guess, D. (1983). Severely handicapped students. Boston, MA: Houghton Mifflin.
- Sailor, W., & Haring, N. (1977). Some current directions in education of the severely/multiply handicapped. AAESPH Review, 2, 3-23.

- Sailor, W., Wilcox, B., & Brown, L. (1980). Methods of instruction for severely handicapped students. Baltimore: Paul H. Brookes.
- Salend, S. J., & Washin, B. (1988). Team-assisted individualization with handicapped adjudicated youth. Exceptional Children, 55(2), 174-180.
- Schiefelbusch, R. L., & McCormick, L. P. (1981). Language and speech disorders. Englewood Cliffs, NJ: Prentice-Hall.
- Schooley, H. (1986, June). Special education in the context of national development: The case of Mexico. Paper presented at the annual meeting of comparative and international education, University of California-Berkeley.
- Schwartz, S., & Johnson, J. H. (1983). Psychopathology of childhood. New York: Pergamon Press.
- Shames, G., & Wiig, E. (Eds.). (1982). Human communication disorders: An introduction. Columbus, OH: Charles E. Merrill.
- Shawn, R. P. (1976). Land tenure and the rural exodus in Chile, Colombia, Costa Rica, and Peru. Gainesville, FL: University of Florida Press.
- Sherman, W. (1979). Forced native labor in sixteenth century Central America. Lincoln, NE: University of Nebraska Press.
- Shirley, C. (1982). Care worn Costa Rica. New Republic, 6, 17-21.
- Sloan, J. (1986). Precedent and education in Latin America: The rural-urban imbalance. In R. Cummings, & D. Lemke (Eds.), Educational innovations in Latin America (pp. 178-186). Metuchen, NJ: The Scarcecrow Press.
- Smith, R. M., Neisworth, J. T., & Hunt, F. M. (1983). The exceptional child: A functional approach. (2nd ed.). New York: McGraw-Hill.
- Smith, W. (1983). Costa Rica, a country study. Washington, DC: United States Government Printing Office.

- Snyder, D. P. (1982). Future role of special education in regular education. Kansas City, KS : Midwest Regional Speech Center.
- Sontag, E., Certo, N., & Button, J. E. (1979). On an distinction between education of severely handicapped and a doctrine of limitations. Exceptional Children, 45(8), 604-616.
- Sontag, E., Smith, J., & Sailor, W. (1977). The severely/profoundly handicapped: Who are they? Where are we? Journal of Special Education, 11(1), 5-11.
- Stainback, S., & Stainback, W. (1985). Integrating students with severe handicaps into regular schools. Reston, VA: Council of Exceptional Children.
- Stile, S. W., & Pettibone, T. J. (1980). Training and certification of administrators in special education. Exceptional Children, 46(7), 530-533.
- Stephens, T. M. (1977). Teaching skills to children with learning and behavior disorders. Columbus, OH: Charles E. Merrill.
- Stepp, R. (1982). Microcomputers: Macro-learning for the hearing impaired. American Annals of the Deaf, 127, 472-475.
- Stolow, W., & Clovers, R. (1981). Handbook of severe disabilities. Washington, DC: United States Government Printing Office.
- Swanson, B. M. & Willis, D. J. (1981). Understanding exceptional children and youth. Chicago, IL: Rand McNally.
- Tablada, T. (1984). Counseling families in Latin America. The Association for Persons with Severe Handicaps, 11(3), 5-15.
- Taylor, S. J., & Bogdan, R. (1984). Qualitative research methods: The search for meanings (2nd ed.). New York: John Willey.
- Thomason, J., & Aekell, C. (1980). Educating the severely/profoundly handicapped in the public schools: A side by side approach. Exceptional Children, 46(7), 114-122.

- Tuttle, D. (1984). Self-esteem and adjusting with blindness. Springfield, IL: Charles C Thomas.
- Umsted, R. (1972). Improving Braille reading. New Outlook for the Blind, 66, 169-177.
- U. S. Department of Education. (1974). Definition of severely handicapped children (Code of Federal Regulations, Title 45, section 121.2.). Washington, DC: Bureau of Education for the Handicapped.
- U. S. Department of Education. (1984). Sixth annual report to Congress on implementation of Public Law 94-142: The Education for All Handicapped Children Act. Washington, DC: United States Government Printing Office.
- U. S. Office of Education (1977). Procedures for evaluating specific learning disabilities (Report No. 42, 65082-65085). Washington, DC: Federal Register.
- Valletutti, P. J. & Bender, M. (1982). Teaching interpersonal and community living skills. Baltimore: University Park Press.
- Valletutti, P. J., & Sims-Tucker, B. M. (1984). Severely and profoundly handicapped students. Baltimore: Paul H. Brookes.
- Van Riper, C. (1978). Speech correction: Principles and methods. (6th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Veliz, C. (1980). The centralist tradition of Latin America. Princeton, NJ: Princeton University Press.
- Vincent, J., Salisbury, C., Walter, G., Brown, P., Gruenewald, L. & Powers, M. (1980). Program evaluation and curriculum development in early childhood/special education: Criteria of the next environment. In W. Sailor, B. Wilcox, & L. Brown (Eds.), Methods of instruction for severely handicapped students (pp. 303-328). Baltimore: Paul H. Brookes.
- Vitello, S. J., & Soskin, R. M. (1985). Mental retardation. Englewood Cliffs, NJ: Prentice-Hall.

- Walker, J. E., & Shea, T. M. (1988): Behavior management: A practical approach for educators. Columbus, OH: Charles E. Merrill.
- Wallace, G., & McLoughlin, J. A. (1979). Learning disabilities: Concepts and characteristics. Columbus, OH: Charles E. Merrill.
- Warren, D. H. (1981). Visual impairments. In J. M. Kauffman & D. P. Hallahan (Eds.), Handbook of special education (pp. 125-142). Englewood Cliffs, NJ: Prentice-Hall.
- Warren, D. (1984). Blindness and early childhood development. New York: American Foundation for the Blind.
- Wilcox, B. (1979). Severe/profound handicapping conditions: Administrative conditions. In M. S. Lilly, Children with exceptional needs (pp. 476-485). New York: Holt, Rinehart, and Winston.
- Wilcox, B., & Thompson, A. (1980). Critical issues in educating autistic children and youth. United States Department of Education, Office of Special Education.
- Williams, J. M. (1984). The psychological treatment of depression. New York: The Free Press.
- Writer, J. (1981). An assessment of training received and training needed by teachers of severely multihandicapped students. Unpublished doctoral dissertation, University of Texas at Austin.
- Writer, J. (1988). Functional educational assessment strategies for students who are severely/multiply handicapped. Unpublished manuscript, University of San Diego, California.
- Zaher, W. (1983). Education in Costa Rica. Paper presented at the Western Region of the Comparative and International Education Society and the Far Western Philosophy of Education Society, Los Angeles, CA.

APPENDIX A

Administrators' Questionnaires

In English and Spanish

Appendix A
Questionnaires

Special Education Administration

Position _____ School/Agency _____

Address _____

I. Background Data

A. Professional Preparation:

School/University	Dates	Area(s) of Study
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B. Membership/Professional Organizations:

C. Subscriptions to Professional Journals:

D. Experience Working with Students who are Handicapped:

Position	Program	Types of Students	Dates
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E. Teaching Credentials Held:

II. Teacher Education Programs

A. What Costa Rican universities have special education teacher training programs?

<u>University</u>	<u>Training Area(s)</u>	<u>Degrees Offered</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

B. How would you evaluate the special education teacher preparation programs in Costa Rica? (Circle one):

1	2	3	4	5
-----	-----	-----	-----	-----
Poor		Average		Outstanding

C. What professional qualifications must teachers have to work with students who are handicapped?

III. Demographic Data on Costa Rican Special Education Services

A. What funding (financial support) is provided to educate children and youth who are handicapped? (describe):

B. Approximately how many children and youth in Costa Rica are in need of special education services?

Approximately how many receive school services?

_____ Students.

C. Approximately how many schools in Costa Rica serve children and youth with handicaps?

_____ Schools.

D. At what ages are children and youth with handicaps provided special education services?

Ages _____.

E. How would you evaluate (rate) Costa Rican special education services to children and youth with handicaps? (Circle one):

1 2 3 4 5
 |-----|-----|-----|-----|

Poor

Average

, Outstanding

F. To what extent are the following statements true in regard to persons who are handicapped in Costa Rica? (Circle the number that applies):

1. Persons who are handicapped are treated as valued members of their community?

Definitely
not true

Somewhat
true

Definitely
true

1

2

3

4

5

2. Persons who are handicapped participate in all aspects of Costa Rican life (e.g., jobs, social activities, etc.):

Definitely
not true

Somewhat
true

Definitely
true

1

2

3

4

5

3. Most people in Costa Rica believe that children and youth who are handicapped should receive an education?

Definitely		Somewhat		Definitely
not true		true		true
1	2	3	4	5

4. What cultural aspects should be taken into account when educating children and youth who are handicapped in Costa Rica? (describe)

IV. Demographic School Data

(This section is to answered by school site administrators only. Other administrators should proceed to section V).

A. How many special education students are served at your school?

_____ students.

B. What types of handicaps do they have (e.g., mental retardation; behavioral disorders; orthopedic handicaps; vision impairments; hearing impairments; etc.)?

C. What is the age range of the special education students at your school?

From _____ to _____ years old.

D. What education specialists (e.g., regular education teachers; speech therapists; etc.) help the special education teachers work with students who are handicapped?

E. Describe the role that the parents of special education students play in planning and carrying out special education programs?

F. To what extent are you involved in the following activities? (Circle the number that applies):

1. Keeping personnel informed of changes in special education policies:

1	2	3	4	5
Never	Yearly	Monthly	Weekly	Daily

2. Working with personnel in assessing students to classes:

1	2	3	4	5
Never	Yearly	Monthly	Weekly	Daily

3. Obtaining materials for use in special education classrooms:

1	2	3	4	5
Never	Yearly	Monthly	Weekly	Daily

4. Participating in the referral and assessment of special education students:

1	2	3	4	5
Never	Yearly	Monthly	Weekly	Daily

5. Evaluating program effectiveness and providing feedback about this to teacher:

1	2	3	4	5
Never	Yearly	Monthly	Weekly	Daily

6. Ensuring that the goals of the special education curriculum are as close as possible to the regular education curriculum:

1	2	3	4	5
Never	Yearly	Monthly	Weekly	Daily

7. Visiting special education classrooms:

1	2	3	4	5
Never	Yearly	Monthly	Weekly	Daily

8. Talking with parents and families of special education students:

1	2	3	4	5
Never	Yearly	Monthly	Weekly	Daily

9. Communicating with other schools and agencies that serve persons who are handicapped:

1	2	3	4	5
Never	Yearly	Monthly	Weekly	Daily

10. Developing curricula for special education programs:

1	2	3	4	5
Never	Yearly	Monthly	Weekly	Daily

G. What are the goals of your special education program?

H. What are the major concerns that you have for the special education students at your school, both for their lives right now and for their lives in their future?

V. Administrative Issues

A. What is the role of the special education administration (e.g., what are the functions he or she should do)?

B. What is the administrative structure of your school/agency (e.g., roles and responsibilities of key personnel).

C. Do you work with other personnel as a team, when deciding what to do in important situations, or do you or someone else make the decisions?

D. Do you have any written statement of the school/agency purpose or goals? If yes, describe major points:

E. What are the ethical concerns in this organization?

VI. Special Education Program Variables

A. Are there any laws in Costa Rica that provide for educational services and/or protect the rights of children and youth who are handicapped? (If so, describe):

B. How are most children and youth with handicaps referred for special education services (e.g., referral by regular education teacher; referral by parents; etc.):

C. To what extent are the following statements true in regard to the special education services received by persons who are handicapped in Costa Rica? (Circle the number that applies):

1. The majority of the children and youth with handicaps receive special education services:

Definitely not true		Somewhat true		Definitely true
1	2	3	4	5

2. Special education teachers are well paid compared to teachers of nonhandicapped students:

Definitely not true		Somewhat true		Definitely true
1	2	3	4	5

3. Students who receive special education receive quality services that meet their special needs:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

4. All children and youth with handicaps are offered a free, public school program:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

5. Students who graduate from special education programs are prepared to be productive members of their communities (e.g., hold jobs, help with work around there house; etc.):

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

6. Adults who are handicapped lead happy lives:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

7. Adults who are handicapped actively participate in community activities:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

8. Special education teachers and regular education teachers work cooperatively in the design of educational programs for students with handicaps:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

9. Students with handicaps are taught the same skills that nonhandicapped students the same age would do (e.g., a 14 year-old student with handicaps would not do an activity that a 6 year-old nonhandicapped student would typically do):

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

10. Costa Rica provide quality special educational services to children and youth who are handicapped:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

11. Compared to other Latin American countries, Costa Rica provides quality educational services:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

12. Compared to European and North American countries, Costa Rica provides quality educational programs:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

B. What are the major actions that must be taken to improve the special education services to children and youth with handicaps in Costa Rica?

C. If you were President of Costa Rica, what major improvements would you recommend in the field of special education? Why?

ADMINISTRADORES DE EDUCACION ESPECIAL

Puesto _____ Escuela _____

Dirección _____

Número de estudiantes en educación especial que atienden a esta escuela _____ estudiantes.

I. Información Profesional

A. Preparación Académica:

<u>Escuela/Universidad</u>	<u>Fechas</u>	<u>Area(s) de Estudio</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

B. ¿Es miembro de alguna organización profesional?

C. ¿Está usted inscrito(a) a alguna revista profesional relacionada la educación especial? (Si es así, cítelas):

D. Experiencia con estudiantes que requieren educación especial:

<u>Puestos</u>	<u>Programa</u>	<u>Tipo de estudiantes</u>	<u>Fechas</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

II. Programas para la Preparación de Maestros de Educación Especial

A. ¿Qué universidades costarrisenses ofrecen carreras en el área de educación especial?

<u>Universidad</u>	<u>Áreas de entrenamiento</u>	<u>Título Ofrecido</u>

B. ¿Cómo evaluaría los programas de educación especial en Costa Rica? (Marque solo uno):

1	2	3	4	5
-----	-----	-----	-----	-----

Pobre

Promedio

Excelente

C. ¿Qué preparación profesional es necesaria u obligatoria para poder trabajar con estudiantes que requieren educación especial en Costa Rica?

III. Información Demográfica de los Servicios de Educación Especial Costarricenses

A. ¿Qué ayuda financiera reciben los servicios de educación especial en Costa Rica?

B. ¿Cuántos niños y adolescentes que requieren educación especial hay en Costa Rica?

¿Cuántos de ellos reciben educación especial?

_____estudiantes.

C. ¿Cuántas escuelas y/o Colegios de educación especial y/o regular dan servicios a niños y adolescentes que tienen problemas físicos, emocionales, y/o mentales?

_____escuelas. _____colegios.

D. ¿A qué edades aproximadamente reciben servicios de educación especial las personas que lo requieren?

De _____a _____años.

E. ¿Cómo evaluaría usted los servicios de educación en Costa Rica? (Marque sólo uno):

1	2	3	4	5
----- ----- ----- ----- -----				

Pobre

Promedio

Excelente

F. ¿Qué tan ciertas son las siguientes frases con respecto a estudiantes que requieren educación especial en Costa Rica? (Marque el número que más se aplique):

1. Personas con impedimentos físicos, emocionales, y/o mentales, son tratados como gente útil para la comunidad:

Falso

Relativamente

Verdadero

Cierto

1	2	3	4	5
---	---	---	---	---

2. Personas con impedimentos físicos, emocionales, y/o mentales participan en todos los aspectos de la vida social de Costa Rica:

Falso

Relativamente

Verdadero

Cierto

1	2	3	4	5
---	---	---	---	---

3. La mayoría de la gente en Costa Rica cree que las personas con problemas físicos, emocionales, y/o mentales deberían recibir educación:

Falso

Relativamente

Verdadero

Cierto

1	2	3	4	5
---	---	---	---	---

4. ¿Qué aspectos culturales de Costa Rica deberían tomarse en cuenta cuando hablamos de los servicios ofrecidos a niños, adolescentes y adultos que requieren educación especial?

IV. Información Demográfica de Escuelas

(Esta sección deberá ser únicamente respondida por los administradores de escuelas. Otros administradores deberán proceder con la sección siguiente número V).

A. ¿Cuántos estudiantes que requieren educación especial hay en su escuela?

_____ estudiantes.

B. ¿Qué tipo de problemas presentan estos estudiantes (Ej., retraso mental, problemas de conducta, problemas de audición, problemas de visión, problemas de aprendizaje, etc.)? (Describa):

C. ¿Cuál es la edad promedio de los estudiantes?

De _____ a _____ años.

D. ¿Cuáles otros especialistas (Ej., maestras de educación regular, terapistas de lenguaje, terapistas de audición, psicólogos, etc.) ayudan a las maestras de educación especial a trabajar con sus estudiantes? (Nómbrelos):

E. Describa el papel que los padres de estudiantes juegan en el desarrollo de programas de educación especial de sus hijos:

F. ¿Hasta que punto participa usted en las siguientes actividades? (Marque el número que se aplica):

1. Mantener informado al personal de la escuela de cambios o desarrollo de nuevas reglas con respecto a la educación especial:

1	2	3	4	5
Nunca	Anualmente	Mensualmente	Semanalmente	Diario

2. Trabajar con el personal de la escuela en el desarrollo de diagnóstico o evaluación de los estudiantes:

1	2	3	4	5
Nunca	Anualmente	Mensualmente	Semanalmente	Diario

3. Brindar materiales de enseñanza a las clases de educación especial:

1	2	3	4	5
Nunca	Anualmente	Mensualmente	Semanalmente	Diario

4. Participar con el personal de la escuela en el diagnóstico y/ o referir estudiantes a otras escuelas:

1	2	3	4	5
Nunca	Anualmente	Mensualmente	Semanalmente	Diario

5. Evaluar el progreso de cada programa de educación especial brindando a cada maestra información y ayuda para el mejoramiento de cada programa:

1	2	3	4	5
Nunca	Anualmente	Mensualmente	Semanalmente	Diario

6. Estar seguro que los programas de educación especial estén lo más parecido posible a los programas de educación regular:

1	2	3	4	5
Nunca	Anualmente	Mensualmente	Semanalmente	Diario

7. Visitar las clases de educación especial:

1	2	3	4	5
Nunca	Anualmente	Mensualmente	Semanalmente	Diario

8. Hablar y estar en contacto con los padres de los estudiantes:

1	2	3	4	5
Nunca	Anualmente	Mensualmente	Semanalmente	Diario

9. Mantener una comunicación con otras escuelas o clínicas de educación especial:

1	2	3	4	5
Nunca	Anualmente	Mensualmente	Semanalmente	Diario

10. Desarrollar planes de educación especial para los estudiantes:

1	2	3	4	5
Nunca	Anualmente	Mensualmente	Semanalmente	Diario

G. ¿Cuáles son las metas u objetivos de éste programa de educación especial? (Explique):

H. ¿Cuáles son las metas que tiene usted con respecto al futuro de los estudiantes que requieren educación especial? (Explique):

V. Asuntos Administrativos

A. ¿Cuál es el papel que juegan los administradores de educación especial? (Ej., cuáles son las funciones que él o ella desempeñan) (Describa):

B. ¿Cuál es la estructura administrativa de éste programa? (Ej., cómo delega la responsabilidad, cómo toma las decisiones, cómo ejecuta y desarrolla reglas y/o regulaciones dentro de ésta organización):

C. ¿Es usted quien toma las decisiones principales de ésta organización, o trabaja en grupo con otras personas para tomarlas en situaciones importantes?

D. ¿Cuenta su Institucion con algún documento que sirva para describir los principales objetivos de su organización? Si es así, enumere los puntos principales:

E. ¿Cuáles son los principios éticos que prevalecen en su organización?

VI. Variables de los Programas de Educación Especial

A. ¿Existe alguna ley que proteja los derechos y brinde una educación a personas con problemas físicos, emocionales, y/o mentales en Costa Rica?

Si _____ No _____.

Si es así, nómbrela y explique brevemente:

B. ¿Cómo son referidas las personas que requieren servicios de educación especial? (Ej., son referidos por maestras en educación regular, por padres de familia, u otros profesionales, por ambos) (Explique):

C. De las siguientes frases, marque con una X la que en su criterio es correcta.

1. La mayoría de las personas que requieren educación especial en Costa Rica la reciben sin problemas:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

2. Maestros de educación especial reciben buenos sueldos comparados con maestros de educación regular:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

3. Para estudiantes que reciben educación especial se utilizan los mejores servicios profesionales que hay en el país:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

4. Los estudiantes que requieren educación especial la reciben gratuitamente en escuelas públicas:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

5. Estudiantes que se gradúan de las escuelas de educación especial son miembros productivos de su comunidad (Ej., pueden trabajar, ayudar en las actividades del hogar, etc.):

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

6. En su opinion las personas que educación especial son o no felices:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

7. Adultos que requieren educación especial participan activamente en actividades de la comunidad:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

8. Maestros de educación especial y/o educación regular trabajan juntos en el desarrollo de programas educativos de estudiantes que la requieren:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

9. A los estudiantes con impedimentos físicos, emocionales y/o mentales, se les enseña con los mismos parametros que a los estudiantes que no tienen problemas (Ej., un niño de 14 años que necesita educación especial no podría hacer una actividad de un niño de 6 años que no necesita educación especial):

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

10. Costa Rica ofrece servicios satisfactorios y competentes de educación especial a estudiantes que lo necesitan:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

11. Comparando los sistemas educativos en países Latino americanos, podría decirse Costa Rica ofrece servicios educativos mas competentes:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

12. Relacionando dichos sistemas con Europa y Norte America, podría decirse que Costa Rica ofrece servicios educativos competentes:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

B. ¿Cuáles son las principales acciones que se deben llevar a cabo para poder mejorar los servicios de educación especial en Costa Rica?

C. Si usted fuera Presidente de Costa Rica, ¿que cambios o mejoras llevaría a cabo para ayudar a desarrollar el campo de la Educación Especial en Costa Rica y por qué?

APPENDIX B

Special Education Teachers' Questionnaires

In English and Spanish

Appendix B

Special Education Teachers

Position _____ School _____
 School Address/Location _____
 Number of special education students served at this
 school _____

I. Background DataA. Professional Preparation

School/University	Dates	Area(s) of Study
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

B. Membership in professional organizations:

C. Subscriptions to professional journals:

D. Experience working with students who are handicapped:

Position	Program	Types of Students	Dates
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

E. Inservice training/conference participation:

Conference	Topic(s)	Date(s)
_____	_____	_____
_____	_____	_____
_____	_____	_____

II. Preservice Training

A. Teaching credentials held:

B. Which of the following curricular content areas did you receive training in during your University special education teacher training program? (Check areas in which instruction was provided):

- _____ Educational assessment of special populations
- _____ Using special tests
- _____ Assessing requirements of home and community environments (ecological assessments).
- _____ Using systematic observations.
- _____ Pupil/classroom management.
- _____ Adapted teaching techniques and procedures.
- _____ Special materials selection and application.
- _____ Documentation and record keeping.
- _____ Writing weekly lesson plan.
- _____ Designing long-term individual educational programs (e.g., writing individualized annual goals).
- _____ Classroom organization and design.
- _____ Special curriculum development
- _____ Academic skills
- _____ Social skills
- _____ Communication skills

- _____ Perceptual skills
- _____ Fine and gross motor skills
- _____ Daily living skills (e.g., dressing, eating, etc.,)
- _____ Vocational skills
- _____ Recreation and leisure skills
- _____ Domestic skills (e.g., cooking, housekeeping; yard care; etc.)
- _____ Community skills (e.g., shopping; using public transportation)
- _____ Use of microcomputers
- _____ Conducting task analysis (e.g., breaking tasks down into sequential teaching steps)
- _____ Working with professionals from other fields (e.g., speech therapists, regular education teacher; etc.).

C. How would you evaluate (rate) your University special education teacher training program in terms of preparing you to meet the special needs of children and youth who are handicapped? (Circle one):

1	2	3	4	5
----- ----- ----- -----				
Poor	Average		Outstanding	

III. Demographic Classroom Data

A. How many special education students are in your class?

_____ students.

B. What types of handicaps do they have (e.g., mental retardation; behavioral disorders; orthopedic handicaps, vision impairments; hearing impairments; etc.):

C. What is the age range of your students?

From _____ to _____ year olds.

D. How often do your students with handicaps get to work or play with nonhandicapped students during school hours? (Specify activities and amount of time per day):

IV. Special Education Program

A. Draw a diagram (picture) of your classroom (include furniture and equipment):

B. Special Curriculum Development

1. What are the major curriculum areas that you provide training in (e.g., reading skills; vocational skills; communication skills; etc.):

2. Do you develop your own educational programs or do the school administrators tell you what to teach?

a. If the school administrators tell you what to teach, is there a special curriculum guide that you must follow? (Describe):

b. If you develop your own special education programs, are there special curriculum resources (e.g., curriculum guides; books; journals articles; etc.) that you frequently use to help you? (Describe):

3. Do you write individual, long-term educational plans for each of your students that describe what skills you hope each will have at the end of the school year? (Describe):

C. Educational Assessment

1. What special tests do you use to assess your students who are handicapped? (List or describe):

2. Are there procedures other than tests that you use to assess your students (e.g., teacher-made checklists of behavior; classroom observations; interviews of parents and families; etc.)? (Describe):

3. Do other school personnel assess your students (e.g., school psychologist)?

a. If yes, who assess your students?

b. What tests and/or assessment procedures do they use? (List or describe):

4. What are the areas of educational concern that your students are assessed in (e.g., reading skills; motor skills; social skills; etc.)? (List or describe):

Materials and Resources

1. Does the school provide you with the teaching materials and supplies that you need?

If not, where do you get your materials? (Describe):

2. Do you receive money from your school to buy the teaching materials and supplies that you need?

If so, is it enough money to meet the needs of your students?

3. Are the teaching materials and supplies the ones that you feel you need to teach your students?

If not, what materials or supplies do you need? (Describe):

E. Teaching Techniques and Procedures

1. Does your school provide you with a microcomputer to use with your students?

a. If yes, what activities do you use it for?

b. If no, could you use one?

2. Do you break skills to be taught down into small, sequential steps (first step, second step, etc.), prior to instruction? (Describe):

3. What special procedures do you use to record (keep track of) student progress? (Describe):

4. Do you take your students out into the community to teach them skills (e.g., how to shop; how to ride a bus)? If so, how often? (Describe):

5. Describe the role that the parents of your students play in planning and carrying out special education programs?

F. What are the major concerns that you have for your students, both for their lives right now and for their lives in the future? (Describe):

V. Cultural Variables

A. To what extent are the following statements true in regard to persons who are handicapped in Costa Rica (Circle the number that applies):

1. Persons who are handicapped are treated as valued members of their communities:

Definitely		Somewhat		Definitely
not true		true		true
1	2	3	4	5

2. Persons who are handicapped participate in all aspects of Costa Rican life (e.g., jobs; social activities; etc.):

Definitely		Somewhat		Definitely
not true		true		true
1	2	3	4	5

3. Most people in Costa Rica believe that children and youth who are handicapped should receive an education:

Definitely		Somewhat		Definitely
not true		true		true
1	2	3	4	5

B. What cultural aspects should be taken into account when educating children and youth who are handicapped in Costa Rica?

VI. Special Education Services:

A. To what extent are the following statements true in regard to the special education services received by persons who are handicapped in Costa Rica? (Circle the number that applies):

1. The majority of children and youth with handicaps receive special education services:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

2. Special education teachers are well paid compared to teachers of nonhandicapped students:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

3. Students who receive special education receive quality services that meet their special needs:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

4. All children and youth with handicaps are offered a free, public school program:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

5. Students who graduate from special education programs are prepared to be productive members of their communities (e.g., hold jobs, help with work around there house; etc.):

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

6. Adults who are handicapped lead happy lives:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

7. Adults who are handicapped actively participate in community activities:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

8. Special education teachers and regular education teachers work cooperatively in the design of educational programs for students with handicaps:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

9. Students with handicaps are taught the same skills that nonhandicapped students the same age would do (e.g., a 14 year-old student with handicaps would not do an activity that a 6 year-old nonhandicapped student would typically do):

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

10. Costa Rica provide quality special educational services to children and youth who are handicapped:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

11. Compared to other Latin American countries, Costa Rica provides quality educational services:

Definitely		Somewhat		Definitely
not true		true		true
1	2	3	4	5

12. Compared to European and North American countries, Costa Rica provides quality educational programs:

Definitely		Somewhat		Definitely
not true		true		true
1	2	3	4	5

B. What are the major actions that must be taken to improve the special education services to children and youth with handicaps in Costa Rica?

C. If you were President of Costa Rica, what major improvements would you recommend in the field of special education? Why?

MAESTROS DE EDUCACION ESPECIAL

Posición _____ Escuela _____

Dirección _____

Número de estudiantes en educación especial que asisten a ésta escuela: _____ estudiantes.

I. Información Profesional

A. Preparación Escuela/Universidad Fechas Area(s) de Estudio

B. ¿Es miembro de alguna organización profesional?

C. ¿Está usted inscrito(a) a alguna revista profesional relacionada con la educación especial? (Si es así, cítela):

D. Experiencia con estudiantes que requieren educación especial:

<u>Puestos</u>	<u>Programa</u>	<u>Tipo de estudiantes</u>	<u>Fechas</u>
----------------	-----------------	----------------------------	---------------

E. Conferencias, convenciones, y/o congresos a los cuales usted ha asistido últimamente:

<u>Conferencia</u>	<u>Tema</u>	<u>País</u>	<u>Fecha</u>
--------------------	-------------	-------------	--------------

II. Preparación Universitaria

A. ¿Cuáles son las áreas de educación especial en las cuales usted fue entrenado? (Ej., retardo mental, problemas de aprendizaje, etc.):

B. ¿En cuáles de las siguientes áreas de educación especial usted fue entrenado? (Marque las áreas en las cuales recibió entrenamiento):

- ☐ Evaluación/diagnóstico de estudiantes que requieren educación especial.
- ☐ Usar exámenes de diagnóstico específicos para cada problema.
- ☐ Evaluación de los requerimientos de las actividades en el hogar y la comunidad.
- ☐ Realizar observaciones sistemáticas.
- ☐ Manejo de conducta en clase.
- ☐ Adaptación y aplicación de técnicas de enseñanza especial.
- ☐ Selección de material y su aplicación.
- ☐ Documentación y registro de actividades diarias.
- ☐ Escribir planes de educación semanal.
- ☐ Desarrollar objetivos o metas a largo plazo para cada niño (Ej., escribir objetivos de enseñanza anuales).
- ☐ Organización de la clase y diseño (Ej., acomodar muebles, materiales, etc.).
- ☐ Desarrollo o diseño de material especial:
 - ☐ En el desarrollo de habilidades académicas
 - ☐ En el desarrollo de habilidades sociales
 - ☐ En el desarrollo de habilidades de comunicación
 - ☐ En el desarrollo de habilidades perceptivas

- ___ En el desarrollo de habilidades motoras (finas y gruesas)
- ___ En el desarrollo de habilidades que son necesarias para actividades diarias (vestirse, comer, etc.)
- ___ En el desarrollo de habilidades vocacionales
- ___ En el desarrollo de habilidades de recreación y entretenimiento (Ej., jugar, ir al parque, cine, etc.)
- ___ En el desarrollo de habilidades del hogar (Ej., limpiar la cocina, dormitorio, cocinar, etc.).
- ___ En el desarrollo de habilidades necesarias para sobrevivir en la comunidad (Ej., ir de compras, tomar el autobus, taxi, etc.)
- ___ En el uso de computadoras para la enseñanza especial
- ___ Enseñar en secuencia las habilidades que se planean desarrollar (Ej., escribir los pasos en secuencia que se seguirán al enseñar una habilidad)
- ___ Trabajar en conjunto con otros profesionales interesados en el campo de educación especial (Ej., audiólogos, psicólogos, terapeutas de lenguaje, etc.)

C. ¿Cómo evaluaría usted (clasifica) su entrenamiento universitario en el campo de educación especial para satisfacer las necesidades de sus estudiantes?

1	2	3	4	5
----- ----- ----- ----- -----				

Insuficiente

Bueno

Excelente

III. Información Demográfica de Clases en Educación Especial

A. ¿Cuántos estudiantes que requieren educación especial existen en su clase?

_____estudiantes.

B. ¿Qué tipo de problema presentan sus estudiantes (Ej., retardo mental, problemas de aprendizaje, problemas de conducta, problemas emocionales, problemas ortopédicos, problemas de lenguaje, problemas de visión o ceguera, problemas de audición, etc.)?

C. ¿Cuál es la edad promedio de sus estudiantes?

De _____ a _____ años.

D. ¿Qué tan seguido sus estudiantes que requieren educación especial conviven con estudiantes que no requieren enseñanza especial? (Especifique las actividades que realizan juntos y el tiempo promedio por día):

IV. Programas de Educación Especial

A. Dibuje un diagrama de su clase (fotografía)(Incluya muebles, equipo especial, etc.)

B. Desarrollo de Material Especial

1. ¿Cuáles son las áreas de educación especial en que usted da entrenamiento (Ej., lectura, comunicación, escritura, etc.)?

2. ¿Desarrolla usted su propio material de enseñanza o el Director del programa le dice cuáles utilizar?

a. Si el Director del programa le dice qué debe utilizar, ¿existe alguna guía especial que usted deba seguir? (Explique):

b. Si Usted crea su propio material de enseñanza, ¿existe algún tipo de libros u otros recursos de información que utilice para el desarrollo de estos materiales?:

3. ¿Escribe usted planes educativos para cada estudiante en el cual se describan las habilidades que se desea desarrollar cada semestre o en algún tiempo determinado? Si es así, Explíquelos:

C. Evaluación Educacional/Diagnóstico

1. ¿Cuáles son los exámenes de diagnóstico que usted utiliza para la evaluación de sus estudiantes? (Describa)

2. ¿Existen otros procedimientos de diagnóstico, que no sean los nombrados anteriormente, para evaluar a sus estudiantes? (Ej., listas de observaciones en clase, entrevistas estructuradas para los padres de familia, etc.)

3. ¿Existen otros profesionales que evalúen a los estudiantes (Ej., psicólogos, etc)?

Si _____ No _____.

a. Si es así, ¿quién evalúa?

b. ¿Qué procedimiento(s) de diagnóstico utilizan esos profesionales? (Explique brevemente)

4. ¿Cuáles son las áreas de educación que usted u otros evalúan en los estudiantes? (Ej., habilidades de lectura, de comunicación oral y escrita, motrices, sociales, etc.) (Describa):

D. Materiales y Recursos Educativos

1. ¿La escuela provee los materiales de educación que Ud. necesita?

Si _____ No _____.

Si no es así, ¿De donde obtiene los materiales de enseñanza?
(Describa):

2. ¿Recibe usted ayuda financiera de parte de la escuela para comprar materiales educativos?

Si _____ No _____.

Si es así, ¿el dinero que usted recibe es suficiente para satisfacer las necesidades educacionales de sus estudiantes?

3. ¿Cree usted que los materiales que utiliza para la enseñanza especial son suficientes e ideales para cada estudiante?

Si _____ No _____.

Si no es así, ¿Qué materiales o recursos de enseñanza especial necesita usted en su clase?

E. Técnicas de Enseñanza Especial y Procedimientos

1. ¿Existe en su escuela una computadora para el uso de los estudiantes?

Si _____ No _____.

a. Si es así, ¿qué actividades desarrollan en la computadora?

b. Si no es así, ¿le gustaría tener una computadora para sus estudiantes?

2. ¿Planifica usted las actividades en secuencia antes de enseñarlas a sus alumnos (Ej., primer paso, segundo paso, etc.)?

3. ¿Cuál procedimiento usa usted para registrar el progreso de cada estudiante?

4. ¿Lleva usted a sus estudiantes fuera de la escuela para enseñarles habilidades específicas (Ej., cómo comprar, usar dinero, tomar el autobús, etc.)? Si es así, ¿con qué frecuencia lo hace? Explique brevemente:

5. ¿Qué papel desempeñan los padres de estudiantes que requieren educación especial en el desarrollo y aplicación de programas educativos?

F. ¿Cuáles son las metas que tiene usted con respecto al futuro de los estudiantes que requieren educación especial?

V. Variables Culturales

A. ¿Analice y escoja la frase correcta con respecto a estudiantes que requieren educación especial en Costa Rica? (Circule el número que más se aplique):

1. Personas con impedimentos físicos, emocionales, y/o mentales, son tratados como gente valuable para la comunidad:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

2. Personas con impedimentos físicos, emocionales, y/o mentales participan en todos los aspectos de la vida social de Costa Rica:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

3. La mayoría de los costarricenses opinan que las personas con problemas físicos, emocionales, y/o mentales deberían recibir educación:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

B. ¿Qué aspectos culturales de Costa Rica deberán tomarse en cuenta cuando hablamos de la educación dirigida a niños, adolescentes y adultos que requieran educación especial?

VI. Servicios de Educación Especial

A. ¿De las siguientes frases marque con una X la que en su criterio es correcta:

1. La mayoría de los estudiantes que requieren educación especial en Costa Rica no encuentran obstáculos para recibirla:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

2. Maestros de educación especial reciben buenos sueldos en comparación con maestros de educación regular:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

3. Para estudiantes que reciben educación especial se utilizan los mejores servicios profesionales que hay en el país:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

4. Los estudiantes que requieren educación especial la obtienen gratuitamente en todas las escuelas públicas:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

5. Estudiantes que terminan con la escuela de educación especial están preparados para ser miembros productivos y útiles en la comunidad (Ej., pueden trabajar, ayudan en las actividades del hogar, etc.):

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

6. En su opinión las personas adultas que requieren educación especial son o no felices:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

7. Los adultos que requieren educación especial participan en las actividades de la comunidad:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

8. Los maestros de educación especial y los de educación regular trabajan coordinadamente en el desarrollo de programas educativos de estudiantes que requieren dicha educación:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

9. A estudiantes con impedimentos físicos, emocionales y/o mentales, se les enseñan las mismas habilidades que a los estudiantes que no tienen problemas (Ej., un niño de 14 años que necesita educación especial no podría hacer una actividad de un niño de 6 años que no necesita educación especial):

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

10. Costa Rica ofrece muy buenos servicios de educación especial a estudiantes que lo necesitan:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

11. Comparando los sistemas educativos en países Latino Americanos, podría decirse que Costa Rica ofrece servicios educativos competentes:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

12. Relacionando dichos sistemas educativos con Europa y Norte America, podría decirse que Costa Rica ofrece servicios educativos competentes:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

B. ¿Cuáles son las principales acciones que se deben llevar a cabo para poder mejorar los servicios de educación especial en Costa Rica?

C. Si usted fuera Presidente de Costa Rica, ¿qué cambios o mejoras llevaría a cabo para ayudar a desarrollar el campo de la Educación Especial en Costa Rica y por qué?

APPENDIX C

Teacher Educators' Questionnaires

In English and Spanish

Appendix C

Teacher Educators

Position _____ School/Agency _____
 Address _____

I. Background Data

A. Professional Preparation:

School/University	Dates	Area(s) of Study
_____	_____	_____
_____	_____	_____
_____	_____	_____

B. Membership/Professional Organizations:

C. Subscriptions to Professional Journals:

D. Experience Working with Students who are Handicapped:

Position	Program	Types of Students	Dates
_____	_____	_____	_____
_____	_____	_____	_____

E. Teaching Credentials Held:

F. Current Research/Publications in Special Education
(Describe):

II. Demographic Data on Special Education Program

A. Number of students:

1. Enrolled in program: _____

2. Graduated from program: _____

B. Preservice training offered:

1. Areas of training (e.g., mental retardation, physical handicaps, severe handicaps, etc.):

2. Degrees offered (e.g., B.A. in special education):

3. Special education credentials offered (List areas):

4. Curriculum Content Areas (Check areas in which instruction is provided):

_____ Educational assessment of special populations

_____ Using special tests

_____ Assessing requirements of home and community environments (ecological assessments).

_____ Using systematic observations.

- _____ Pupil/classroom management.
- _____ Adapted teaching techniques and procedures.
- _____ Special materials selection and application.
- _____ Documentation and record keeping.
- _____ Writing weekly lesson plan.
- _____ Designing long-term individual educational programs (e.g., writing individualized annual goals).
- _____ Classroom organization and design.
- _____ Special curriculum development
 - _____ Academic skills
 - _____ Social skills
 - _____ Communication skills
 - _____ Perceptual skills
 - _____ Fine and gross motor skills
 - _____ Daily living skills (e.g., dressing, eating, etc.,)
 - _____ Vocational skills
 - _____ Recreation and leisure skills
 - _____ Domestic skills (e.g., cooking, housekeeping; yard care; etc.)
 - _____ Community skills (e.g., shopping; using public transportation)
- _____ Use of microcomputers
- _____ Conducting task analysis (e.g., breaking tasks down into sequential teaching steps)
- _____ Working with professionals from other fields (e.g., speech therapists, regular education teacher; etc.).

5. Text Books and Other Teaching Materials Used:

Books	Publishers (Include Location)
_____	_____
_____	_____
_____	_____

C. Financial Support:

What funding (financial support) do you receive for your special education teacher training program?

D. Other:

1. What other Costa Rican universities have special education teacher training programs?

University	Training Area(s)	Degrees Offered
------------	------------------	-----------------

2. What is the major goal of your special education teacher training program?

3. How do you evaluate (rate) the overall special education teacher preparation programs in Costa Rica? (Circle one):

1	2	3	4	5
----- ----- ----- -----				
Poor	Average		Outstanding	

III. Demographic Data on Costa Rican Special Education

A. What funding (financial support) is provided to educate children and youth who are handicapped? (describe):

B. Approximately how many children and youth in Costa Rica are in need of special education services?

Approximately how many receive school services?

_____Students.

C. Approximately how many schools in Costa Rica serve children and youth with handicaps?

_____Schools.

D. At what ages are children and youth with handicaps provided special education services?

Ages _____.

E. How would you evaluate (rate) Costa Rican special education services to children and youth with handicaps? (Circle one):

1	2	3	4	5
----- ----- ----- ----- -----				
Poor	Average			Outstanding

F. To what extent are the following statements true in regard to persons who are handicapped in Costa Rica? (Circle the number that applies):

1. Persons who are handicapped are treated as valued members of their community?

Definitely not true		Somewhat true		Definitely true
1	2	3	4	5

2. Persons who are handicapped participate in all aspects of Costa Rican life (e.g., jobs, social activities, etc.):

Definitely not true		Somewhat true		Definitely true
1	2	3	4	5

3. Most people in Costa Rica believe that children and youth who are handicapped should receive an education?

Definitely		Somewhat		Definitely
not true		true		true
1	2	3	4	5

4. What cultural aspects should be taken into account when educating children and youth who are handicapped in Costa Rica? (describe)

IV. Special Education Variables

1. What support services are available to students who are handicapped (e.g., speech therapy; physical therapy; counseling; school nurses; specialists on vision and hearing disorders; etc.)?

2. Are there any laws in Costa Rica that provide for educational services to and/or protect the rights of children and youth who are handicapped? (If so, describe):

3. How are most children and youth with handicaps referred for special education services (e.g., referral by regular education teachers; referral by parents; etc.)?

4. To what extent are the following statements true in regard to the special education services received by persons who are handicapped in Costa Rica? (Circle the number that applies):

a. The majority of children and youth with handicaps receive special education services:

Definitely not true		Somewhat true		Definitely true
1	2	3	4	5

b. Special education teachers are well paid compared to teachers of nonhandicapped students:

Definitely not true		Somewhat true		Definitely true
1	2	3	4	5

c. Students who receive special education receive quality services that meet their special needs:

Definitely not true		Somewhat true		Definitely true
1	2	3	4	5

d. All children and youth with handicaps are offered a free, public school program:

Definitely not true		Somewhat true		Definitely true
1	2	3	4	5

e. Students who graduate from special education programs are prepared to be productive members of their communities (e.g., hold jobs, help with work around there house; etc.):

Definitely not true		Somewhat true		Definitely true
1	2	3	4	5

f. Adults who are handicapped lead happy lives:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

g. Adults who are handicapped actively participate in community activities:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

h. Special education teachers and regular education teachers work cooperatively in the design of educational programs for students with handicaps:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

i. Students with handicaps are taught the same skills that nonhandicapped students the same age would do (e.g., a 14 year-old student with handicaps would not do an activity that a 6 year-old nonhandicapped student would typically do):

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

j. Costa Rica provide quality special educational services to children and youth who are handicapped:

Definitely not true			Somewhat true		Definitely true
1	2	3	4	5	

k. Compared to other Latin American countries, Costa Rica provides quality educational services:

Definitely not true			Somewhat true		Definitely true
1	2		3	4	5

1. Compared to European and North American countries, Costa Rica provides quality educational programs:

Definitely not true			Somewhat true		Definitely true
1	2		3	4	5

5. What countries are most frequently used as models for the special education services provided students with handicaps in Costa Rica (e.g., Mexico; United States; etc.)?

6. What are the major actions that must be taken to improve the special education teacher preparation programs in Costa Rica?

7. What are the major actions that must be taken to improve the special education services to children and youth with handicaps in Costa Rica?

C. If you were President of Costa Rica, what major improvements would you recommend in the field of special education? Why?

PERSONAL DOCENTE EN UNIVERSIDADES
QUE ENTRENAN MAESTROS DE EDUCACION ESPECIAL

Puesto _____ Escuela _____

Dirección _____

I. Información Profesional

A. Preparación Académica:

<u>Escuela/Universidad</u>	<u>Fechas</u>	<u>Area(s) de Estudio</u>
----------------------------	---------------	---------------------------

B. ¿Es usted miembro de alguna organización profesional?

C. ¿Está usted inscrito(a) a alguna revista profesional relacionada con la educación especial? (Si es así, cítela):

D. Experiencia con estudiantes que requieren educación especial:

<u>Puestos</u>	<u>Programa</u>	<u>Tipo de estudiantes</u>	<u>Fechas</u>
----------------	-----------------	----------------------------	---------------

E. Publicaciones o estudios realizados últimamente en el área de educación especial (Describa):

II. Información Demográfica de Programas Universitarios de Educación Especial:

A. Número de estudiantes:

1. Matriculados en el programa: _____
2. Graduados del programa: _____

B. Prácticas ofrecidas en educación especial:

1. Áreas de entrenamiento (Ej., retardo mental, incapacidades múltiples, problemas severos, etc.):

2. Títulos ofrecidos por la universidad (Ej. Bachillerato, Licenciatura o Maestría, Doctorado):

3. Permisos para trabajar en educación especial ofrecidos por la universidad (Describa las áreas):

4. Áreas de enseñanza en educación especial (Marque las áreas en las cuales se da entrenamiento):

_____ Evaluación/diagnóstico de estudiantes que requieren educación especial.

_____ Usar exámenes de diagnóstico específicos para cada problema.

_____ Evaluación de los requerimientos de las actividades en el hogar y la comunidad.

_____ Realizar observaciones sistemáticas.

_____ Manejo de conducta en clase.

- _____ Adaptación y aplicación de técnicas de enseñanza especial.
- _____ Selección de material y su aplicación.
- _____ Documentación y registro de actividades diarias.
- _____ Escribir planes de educación semanales.
- _____ Desarrollar objetivos o metas a largo plazo para cada niño (Ej., escribir objetivos de enseñanza anuales).
- _____ Organización de la clase y diseño (Ej., acomodar muebles, materiales, etc.).
- _____ Desarrollo o diseño de material especial:
 - ___ En el desarrollo de habilidades académicas
 - ___ En el desarrollo de habilidades sociales
 - ___ En el desarrollo de habilidades de comunicación
 - ___ En el desarrollo de habilidades perceptuales
 - ___ En el desarrollo de habilidades motoras (finas y gruesas)
 - ___ En el desarrollo de habilidades que son necesarias para actividades diarias (vestirse, comer, etc.)
 - ___ En el desarrollo de habilidades vocacionales
 - ___ En el desarrollo de habilidades de recreación y entretenimiento (Ej., jugar, ir al parque, cine, etc.)
 - ___ En el desarrollo de habilidades del hogar (Ej., limpiar la cocina, cuarto, cocinar, etc.).
 - ___ En el desarrollo de habilidades necesarias para sobrevivir en la comunidad (Ej., ir de compras, tomar el autobús o taxi etc.)
 - ___ En el uso de computadoras para la enseñanza especial
 - ___ Enseñar en secuencia las habilidades que se planean desarrollar (Ej., escribir los pasos en secuencia que se seguirán al enseñar una habilidad)

____ Trabajar en conjunto con otros profesionales interesados en el campo de educación especial (Ej., audiólogos, psicólogos, terapistas de lenguaje, etc.)

5. Libros u otros materiales de enseñanza que se utilizan para investigación y aprendizaje en el programa:

Nombre Publicado por (Incluya la localidad)

C. Ayuda Financiera

¿Qué ayuda financiera reciben ustedes para el desarrollo de programas de entrenamiento en educación especial?

D. Otra Información Relacionada con Programas de Educación Especial:

1. ¿Cuáles otras universidades de Costa Rica ofrecen programas de entrenamiento para maestros en educación especial?

Universidad Areas de Entrenamiento Títulos Ofrecidos

2. ¿Cuál es el principal objetivo de estos programas de educación especial?

3. ¿Cómo evaluaría usted (clasificaría) el entrenamiento universitario (en el campo de educación especial) en Costa Rica? (Escoja la mejor opción)

1 2 3 4 5
 -----|-----|-----|-----|-----|

Pobre

Promedio

Excelente

III. Información Demográfica de la Educación Especial En Costa Rica

A. ¿Qué ayuda financiera se recibe para el desarrollo y aplicación de servicios de educación especial en Costa Rica?

B. ¿Cuántos niños, adolescentes y adultos requieren educación especial en Costa Rica?

¿Cuántas personas reciben servicios de educación especial?

_____ personas.

C. Aproximadamente, ¿Cuántas escuelas y clínicas ofrecen servicios de educación especial?

_____ escuelas _____ clínicas.

D. ¿A qué edades niños y adolescentes reciben educación especial?

_____ años de edad.

E. ¿Cómo evaluaría usted (clasificaría) los servicios de educación especial ofrecidos en Costa Rica?

1 2 3 4 5
 |-----|-----|-----|-----|

Deficiente

Buena

Excelente

F. ¿Qué tan ciertas son las siguientes frases con respecto a estudiantes que requieren educación especial en Costa Rica?

1. Personas con impedimentos físicos, emocionales y o mentales, son tratados como gente útil para la comunidad:

Falso

Relativamente

Verdadero

Cierto

1

2

3

4

5

2. Personas con impedimentos físicos, emocionales y/o mentales participan en todos los aspectos de la vida social de Costa Rica:

Falso

Relativamente

Verdadero

Cierto

1

2

3

4

5

3. La mayoría de la gente en Costa Rica piensan que las personas con problemas físicos, emocionales y/o mentales deberían recibir una educación:

Falso

Relativamente

Verdadero

Cierto

1

2

3

4

5

B. ¿Qué aspectos culturales de Costa Rica deberán tomarse en cuenta cuando hablamos de la educación de niños, adolescentes y adultos que requieren educación especial?

V. Variables de Educación Especial

1. ¿Cuáles son los servicios de educación especial ofrecidos en éste país? (Ej., terapia de lenguaje,, terapia física, terapia psicológica, enfermeras en escuelas, especialistas en audición y visión, etc.)

2. ¿Existe en Costa Rica alguna ley que proteja a las personas excepcionales?

Si _____ No _____.

Si es así, explique brevemente:

3. ¿Quién refiere a las personas que requieren educación especial? (Ej., son referidos por escuelas regulares, maestros en educación regular, padres de familia, etc.)

4. Analice y escoja la frase correcta con respecto a estudiantes que requieren educación especial en Costa Rica (Marque el número que más se aplique):

a. La mayoría de las personas que requieren educación especial en Costa Rica no encuentran obstáculos para recibirla:

Falso

Relativamente

Verdadero

Cierto

1

2

3

4

5

b. Maestros de educación especial reciben buenos sueldos comparados con maestros de educación regular:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

c. Para estudiantes que reciben educación especial se utilizan los mejores servicios profesionales que hay en el país:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

d. Los estudiantes que requieren educación especial la reciben gratuitamente en escuelas públicas:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

e. Estudiantes que se gradúan de las escuelas de educación especial son miembros productivos de su comunidad (Ej., pueden trabajar, ayudar en las actividades del hogar, etc.):

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

f. En su opinión, las personas adultas que requieren educación especial son o no felices:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

g. Adultos que requieren educación especial participan activamente en actividades de la comunidad:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

h. Maestros de educación especial y/o maestros de educación regular trabajan juntos en el desarrollo de programas educativos de estudiantes que la requieren:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

i. A los estudiantes con impedimentos físicos, emocionales y/o mentales, se les enseña con los mismos parámetros que a los que no tienen problemas (Ej., un niño de 14 años que necesita educación especial no podría hacer una actividad de un niño de 6 años que no necesita educación especial):

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

j. Costa Rica ofrece servicios satisfactorios y competentes de educación especial a estudiantes que lo necesitan:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

k. Comparando los sistemas educativos en países Latino Americanos, Costa Rica ofrece servicios educacionales competentes:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

l. Relacionando dichos sistemas con los de Europa y Norte America, podría decirse que Costa Rica ofrece servicios educativos competentes:

Falso		Relativamente		Verdadero
		Cierto		
1	2	3	4	5

5. ¿Qué países son frecuentemente usados como ejemplo o modelo de servicios en educación especial en Costa Rica? (Ej., México, Estados Unidos, etc.):

6. ¿Cuál es son las principales acciones que se deben llevar a cabo para poder mejorar los servicios de educación especial en Costa Rica?

C. Si usted fuera Presidente de Costa Rica, ¿qué cambios o mejoras llevaría usted a cabo para ayudar a desarrollar el campo de la educación especial en Costa Rica y por qué?

APPENDIX D

Cover Letter for Questionnaires

In English and Spanish

Appendix D

Letter Requesting Interview Participation

Date

Dear :

I am a doctoral student from the University of San Diego doing a research of special education services in Costa Rica. In order to gather information about how are the current special education services of Costa Rica, I need your assistance. The attached questionnaire was designed to obtain information about the special education services offered to the students who are handicapped. Your information will not only be benefit the completion of this investigation, but also will create valuable information to improve the special education services in this country. On the other hand, all the information gathered in this research study will be totally confidential.

I would greatly appreciate an opportunity to provide you a complete explanation of the research and secure your participation in this study.

Thank you very much for your attention to this matter and I hope to share with you my findings in the near future.

Sincerely,

Beatriz Villarreal, M.A.

Fecha

Querido(a) :

Soy una estudiante de la Universidad de San Diego quien está escribiendo una tesis de posgrado sobre la educación especial en Costa Rica con el fin de terminar el doctorado en liderazgo educacional. Para poder obtener información de cuales servicios de educación especial existen en Costa Rica, he desarrollado un cuestionario que me ayudará a obtener información sobre el tema. Para poder completar este estudio necesito que usted pueda contestar las preguntas del cuestionario anexo a esta carta. Su información será totalmente confidencial.

Los resultados de este estudio serviran para no sólo ayudar a conocer más el campo de educación especial en este país, pero tambien para poder darnos cuenta cuales son las principales necesidades del campo de educación especial y ayudar a mejorarlo.

Me gustaria compartir con usted los resultados de este estudio en el futuro y mantenernos en contacto lo más pronto possible.

Muchisimas gracias por su atención y cooperación a este estudio.

Beatriz Villarreal, M.A.