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Interdisciplinary Approaches to SNE/IE

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Interdisciplinary Approaches to SNE/IE

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Course title: Interdisciplinary Approaches to SNE/IE

Unit 1

1. Rationale for Interdisciplinary /Multidisciplinary Relations in Special Education

1.1 Introduction

Why is it important to incorporate a multidisciplinary team when making decisions and developing an individualized education program (IEP) for a student with a disability? What is the rationale for involving as many specialists as possible that relate to functions and abilities of the student? Will a better IEP be created with more input from a variety of individuals? What important data about the student can each specialist bring to the team? This chapter discusses answers to these questions and develops a rationale for why a multidisciplinary team is essential to planning and preparing an IEP for a student with a disability.

1.2 Historical Perspectives

After many parents, advocates voiced their opinions over time and individuals and organizations voiced their concerns regarding the education and treatment of individuals with disabilities, along with some very instrumental court cases, changes were made in our educational system. Two important cases were *Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of* Pennsylvania, *343 Fed. Supp.* 279 (1972) and *Mills v. Board of Education of the District of Columbia, 34 F. Supp. 866* (1972). In both the PARC and Mills cases, the judges struck down local laws that excluded children with disabilities from schools. They established that children with a disability have a right to a public education and access to education. These among other factors contributed to Public Law 94-142 being established in *1975.* Public Law 94-142 had been the basis for assuring that all children with disabilities have available free appropriate public education (FAPE). Assuring those rights of parents and their children are protected, providing financial assistance to states, and assessing the effectiveness of those efforts. Before the enactment of this law, the education

needs of millions of children with disabilities were not being fully met (especially those with cognitive disabilities and mental illnesses, who were excluded from schools). Children who played with other children in their local neighborhoods were unable to attend the neighborhood school because of their disability. Because of this law, all students are now entitled to Free Appropriate Public Education (FAPE): they cannot be excluded from school solely because of disability.

Students with disabilities must receive the special education and related services that they need, but for them to get FAPE, several provisions must be in place. The following are basic principles that need to be met:

a) Their needs to be child find and zero reject procedures in place.
b) Identification and assessment must he nondiscriminatory.
c) An individualized education program (IEP) must be developed for students identified with a disability.
d) Students should be placed in their least restrictive environment.
e) Procedural safeguards — such as parents' rights to participate in the educational decision-making process for their child, due process, and mediation when there are disagreements need to be in place.
f) The participation of parents throughout the entire process. and
g) Transition after school needs to be considered. Subsequent reauthorizations of this Act through the years brought greater clarification and enhancements to these significant principles originally developed" (Ashbaker, 2011, p. 31).

According to Individuals with Disabilities Education Improvement Act (IDEA) reauthorization of P.L. 94-142, each student suspected of having a disability will be evaluated in all areas of the suspected disability with assessments that are nondiscriminatory. This assessment should be conducted by a team of evaluators who are knowledgeable and trained in the USC of assessments and capable of gathering relevant and specific information from a variety of sources. In addition, the evaluation materials and procedures selected must be administered in ways that are not racially or culturally discriminatory. The child cannot be subjected to unnecessary tests and assessments that are not needed in order to obtain proper assessment

data on the student (Ashbaker, 2011). Nondiscriminatory identification and assessment are requirements that are necessary when evaluating children suspected of having a disability. Thanks to numerous court cases over the years, knowledge and procedures have improved. The *Larry P. v. Ri1c.* (1984) case highlighted unfair placement based on identification, assessment and evaluation methods. A federal district court in California banned the use of standardized intelligence quotient (IQ) instruments to evaluate African-American students for placement in classes for students with educable mental retardation known today as intellectual or cognitive disabilities. The court ruled that such tests contained racial and cultural bias and discriminated against students from culturally and racially different backgrounds. Local education agencies now must conduct a full individual evaluation before beginning to provide special education and related services to a child with a disability (IDEA. 20 U.S.C. 1414(a) (I)). IDEA and its reauthorizations require that assessment materials be administered in the child's native language or mode of communication (such as sign language) and that the tests are validated for the specific purpose for which they are used. Tests must be administered and interpreted by trained personnel, and more than one test must be used to make a determination.

Nondiscriminatory evaluation means that Students must be evaluated in ways that do not discriminate based on language, culture, or race. This evaluation provides information to be used to determine the child's eligibility for special education and related services, and the team must identify information that is instructionally useful in planning for the child's educational needs. This program is documented in the child's written individualized education program (Ashbaker. 2011, p. 33). This information then helps to plan the appropriate placement for the child. For example, the first step in deciding placement options is always deciding what needs to be done. Only alter deciding what we wish to do for and with an individual with learning disabilities (FAPE), can we judge the placement and amount of service that needs to be provided to attain the goals (Brigham & Bakken, 2013).

1.3 The Multidisciplinary Team

A multidisciplinary team, by its name, is made up of a multitude of professionals that can bring their knowledge and expertise to the table in regards to a student with a disability. By involving many professionals with a multitude of perspectives, better outcomes can he formulated and

achieved, in addition, more data, regarding the student are considered in the decision— making process. Not only are more data available, but the accuracy of the data is improved as direct professionals in designated areas are the ones that are collecting, analyzing and reporting the results. For example, if the student was having issues with mobility, a physical therapist would be invited to collect data (assess the student) and present their results at the I EP meeting. This multiple perspective process enables the team to make more educated decisions regarding the development of an IEP for the student with a disability. Thus: this IEP will be more comprehensive and address the areas that could he missed if the team was not a comprehensive unit. Why did teams expand and become more multidisciplinary? What was the reasoning for this shift in philosophy? Most of it had to do with the student with a disability. It was apparent after careful analysis that the individuals involved were not able to thoroughly investigate the entire child. It was very clear that a few individuals could not collect the most appropriate data nor could they interpret and make educational decisions on it if it was not their area of expertise. Many times, areas were just not assessed as there was no one with the expertise needed to evaluate the student or the team never thought of that as an option. More data were needed by other professionals that could aid in the decision-making process. Although finding a common time for many different professionals to meet can be cumbersome, ultimately, it is important to develop the most appropriate and functioning IEP for the student, parents, and teachers. Involving more professionals is more effective and efficient in providing more accurate information about the student and thus allows these individuals to develop a better plan for him/her to progress in the curriculum and / or prepare for independence in society.

1.3.1 Dealing with Assessment

Years ago, only a few individuals seemed to be responsible for conducting assessments and making educational decisions for students with disabilities The norm was that the school psychologists conducted all of the assessments (IQ and achievement), and in most cases, they were implementing standardized tests to get their results. They would then share their results with the parents, special education teacher, and other related professionals. Parental involvement on IEP team ensures that parents have the right to participate in making decisions regarding the education of their child, including placement decisions and development of the IEP. Over the past several decades since the passage of P.L. 94-142, the

emphasis on family involvement in school decision making has increased in response to federal mandates, and also because research supports that home—school collaboration yields positive results for children (Elizalde-Utnick, 2002: Hubbard & Adams. 2002). In a discussion of techniques to increase home—school collaboration, Esler, Godber and Christenson (2002) observed that such positive partnerships are correlated with higher school achievement. Furthermore, parents must be provided with a copy of the evaluation report and the documentation of eligibility determination, provisions which results in written reports (Plotts. 2012). In complying with federal mandates, school districts recognize the value of parental input into educational planning and programming for exceptional children. Parents have the right and responsibility to be actively involved in their child's educational programming, and professionals must be prepared to accept parents as coequal members of the team. According to Ashbaker (2011), there are advantages of parental participation, namely:

1. Parents are the most knowledgeable resource concerning their child.
2. Parent's participation in the conference increases their awareness of their child's disability.
3. Parent participation improves the likelihood that they will implement recommendations of the team.
4. Parent participation increases the likelihood that recommendations from the team will meet the needs of the individual parents and children.
5. Participation of the parent increases the development of parent-professional relationships.
6. Including parents in this process potentially increases their role as co-instructors.
7. Parent participation increases communication in the future.

Traditionally, psychological tests were supposed to uncover uneven development, and they were typically given by a psychologist. When students performed erratically, failed easier questions requiring recall on recently or remotely presented information, or on tasks which require manipulation of objects, it was noted on the assessment. In addition, if students were unable to reproduce a visual perception in graphic form or confused aspects on the intellective and manipulative aspects of the tests, these discrepancies often revealed that there might be a problem. Given that psychologists were the only ones with assessment data, they were then responsible for deciding if students were

eligible for special education services and where in the educational environment they would receive these services. “Too often the assessment process just involves giving a student norm referenced tests that are used to determine eligibility, an action that Reschly (2000) noted ‘as inappropriate because it would not result in the type of information necessary to plan a student’s IEP. Although norm- referenced tests can give the team clues to help identify students’ needs to accurately plan instruction more fine-grained assessments using procedures such as curriculum-based assessment, curriculum-based measurement, direct observation, and functional behavioral assessment are needed (Yell, Thomas. & Katsiyannis, 2012). Such tests and procedures will be much more useful to the team in determining the present levels of performance and skill deficits in areas in which they need individualized instruction or programming" (Yell & Gaui. 2012. p. 6). Standardized assessments, however, did not typically find current classroom-based knowledge of students; they only found out a more general and global view of what the child knew. In addition, these data did not help the classroom teacher in regards to what the student actually knew versus what they did not know and where they should he placed in their respective curriculum. Once decisions were made, teachers still needed to assess students within the curriculum to find out what the student actually knew and did not know and where classroom instruction would begin. This reliance on the use of standardized testing soon shifted to curriculum-based assessments that could actually tell what the student knew and what they did not know within the school’s curriculum. Combined with an IQ test, the student’s potential versus actual knowledge could be calculated.

Over time, as the field changed, individuals became more educated, a shift from only using standardized assessments was made, and data and opinions from other professionals were incorporated to best meet the needs of the individual student with disabilities. When curriculum-based assessments are implemented to assess where in the curriculum the student should be placed (what the student knows, what he/she is having trouble with), continuous assessments must continue in order to evaluate progress that the student is making. New terminology in the field calls this '*progress monitoring'.* It is crucial that all students participate in progress monitoring to investigate student and teacher progress (Cuenca. Douglas, & Bakken, 2012). The initial formation of true multidisciplinary teams was beginning to be developed. As indicated, the

multidisciplinary team which includes the teacher, school psychologist, parent and other specialists who have knowledge or can assess the strengths and weaknesses of the individual child in question serves as the most functional method of collaboration towards achieving an IEP that will be accurate and comprehensive and benefit the child. Many times, however, other professionals besides the teacher and school psychologist are not included in the evaluation of the student. To derive the best results possible and to develop the most informational and accurate IEP, every professional who can be available to assess and provide input should he included in this process. Through this team approach, many aspects of the whole child are available for observation and management.

Clearly the 2004 reauthorization of IDEA (2004) indicated that the multidisciplinary team must include the parents, not less than one general education teacher of the child (if the child is or may he participating in the general education environment), not less than one special education teacher, the person responsible for assessment who can interpret the instructional implications of evaluation results, an administrator (or other representative who has knowledge of instruction in special and regular education and the availability of resources of the school), any other persons with knowledge or special expertise as appropriate, and, whenever appropriate, the student (Plotts, 2012). An effective team approach does not need to have all of the members in attendance to implement or modify its approach to the pupil's education. There does, however, need to be constant communication between the parties for progress to be made. For example, if the deaf educator was a part of the process, but could not attend the meeting in person, they could print out a summary of what they did with the student, the results, and recommendations and provide this document to all members of the committee prior to the meeting.

1.3.2 Developing the IEP

Every child who receives special education services must have an IEP. The IEP is a written document that details the student’s strengths and needs in any area affected by the disability and identifies the goals and objectives for improvement in those areas. The emphasis of the IEP is on progress in the general curriculum, addressing special factors that may influence a student’s ability to learn (e.g. behavior or communication needs, or limited English

proficiency). The IEP is the documentation that shows that a student is receiving free and appropriate education (Ashbaker, 2011).

The IEP is developed by a collaborative team including the regular and special educators, a parent of the student, a representative of the school administration (representative of the local education agency), and any related service providers who may contribute to the process by knowing about the student or about educational services for the student. It should he noted that the special education teacher or administrator should ensure that parents attend the initial IEP meeting. It is important to keep good documentation of all attempts to get parents to come to the meeting (e.g. phone calls, emails or notes) in case they cannot he contacted or choose not to come. Another option to consider is to change the day, time, or place of the meeting to allow the parent(s) to attend. Sometimes, parents work schedules prevent them from attending an IEP meeting held during the typical school day. Scheduling a meeting outside the normal school day to fit a parent's schedule benefits everyone and shows parents that you are vested in their input. ln addition, because the classroom teacher knows the curriculum and ways to help a student access it, the teacher should participate in developing the IEP. This team considers the student's present levels of educational performance and makes plans for improvement during the year. The IEP team then decides what special education and related services are required to help the student achieve the goals and objectives that were developed. In addition, the IEP team must determine how to measure progress, how often this should occur, and how to inform parents about the student's progress toward accomplishing the IEP goals. Finally, the team must meet at least annually to update the IEP (Ashbaker. 2011), but if problems arise or changes are needed, the team can reconvene whenever it is appropriate.

Full individual evaluation by the IEP team means that eligibility must he determined by a multidisciplinary team based on information from an individualized evaluation in a number of areas such as language, cognitive— intellectual, adaptive behavior, academic, emotional, medical— physical, and behavioral, with specific areas of formal and informal assessment determined by the IFP team. Multidisciplinary teams are mandated to ensure that different perspectives from diverse groups are considered, to limit the decision—making authority of any one individual, and to involve parents (Plotts, 2012). Although mandated by law, it is not very common to include as many different individuals as these volumes suggest. All of these individuals, however, can contribute very valuable information to the process. Developing

students' IEPs refers to the process of creating a student's individualized program of special education and related services. Thus, the IEP is the blueprint of a student's FAPE. IDEA mandates the process and procedures for developing the IEP. Because of problems in the past of getting appropriate individuals to attend the IEP meeting, IDEA mandates the persons who must be on IEP team. Clearly, other school- based personnel are permitted, but not required, to attend the IEP meeting.

It is important to note that other professionals who have a specific expertise are not required to come, but it is suggested they be included and participate. Although not mandated to come, the belief of including any key professional who can provide input and assessment data that will lead to a more comprehensive view of the student as well as a more directed IEP is suggested. Including members on the IEP team who have specialized expertise in areas that may be needed to meet the unique educational needs of a student (e.g. community aspects, auditory or visual needs, or health— related professionals) should always he considered. Of course, this will depend on the needs of the particular student. It is important that everyone involved come to the IEP meeting with an open mind and seriously consider suggestions made by everyone in attendance. An IEP should never he developed prior to the meeting. Individuals may come with a draft of their section of the IEP but write "draft" at the top of the IEP to ensure that everyone understands that it is not a final IEP. The actual IEP should be formulated and developed at the meeting including all relevant data and participants involved.

Table: IDEAs Evaluation Requirements

Evaluation Requirements	Description
The team must use a variety of assessment tools and strategies to gather relevant functional, developmental and academic information, including information provided by the parent, that may assist in determining (a) whether the student has a disability and (b) the content of the student's IEP.	Assessments should not only involve formal tests but curriculum based assessments, interviews, observations, and other procedures that will assist the team to determine eligibility and instructional needs.
The team cannot use a single measure or assessment as the sole criterion for determining whether a student has a	No single measure (e.g. an IQ test) can be the basis for determining eligibility of

disability or determining an appropriate educational program for a student.	instructional programming.
The team must use technically sound instruments to assess the contribution of cognitive, behavioral, physical and developmental factors.	Assessment procedures that are used should have good technical characteristics and be appropriate to assess different factors that may be involved with a student's disability.
Assessment and other evaluation materials (a) must not be discriminatory on a racial or cultural basis (b) must be provided and administered so as to yield accurate information on what a student knows and can do academically, developmentally and functionally (c) must be used for purposes for which the assessments are reliable and valid (d) must be administered by trained and knowledgeable personnel; and (e) are administered in accordance with the instructions provided by the producer of the assessments.	The persons who conduct the assessments must have been trained in administering tests and other assessment procedures. Moreover, all assessments must be reliable, valid, and accurate assessments of academic and functional factors.
A student must be assessed in all areas of suspected disability.	When a student is assessed, the team must ensure that all areas of concern are assessed.
Assessment tools and strategies must provide information and directly assist the team in determining the educational needs of a student.	It is important that assessments not only be used for determining eligibility but that they are useful for instructional planning.

Source: Yell and Gatti (2012, p.5)

Table 2: IEP Team Members

IEP Team Members	Description
The parents of the student.	Either one or both of a student's parents.
General education teacher of the student.	At least one general education teacher who has had or does have the student.
Special education teacher of the student.	At least one special education teacher who has had or does have the student.
Local education agency representative	A representative of the school district. This person is often a principal or assistant principal of the student's school.
Individual who can interpret the instructional implications of the assessment evaluation.	A person who understands and can interpret the instructional implications of the assessment. This person is often a school psychologist although it may be another person already on the IEP team (e.g. special education teacer).
Other persons who have knowledge of special expertise regarding the student, including related services personnel.	The student's parents or school personnel may appoint other members who have knowledge of the student or the student's disability.
The student, when appropriate.	The student must be invited to the IEP team if transition services are considered.

Source: Yell and Gatti (2012, p.7)

Unit- end activities

- Objectives questions

Group A

Tick the best answer.

1. According to Individuals with Disabilities Education Improvement Act (IDEA) reauthorization of P.L. 94-142, each student suspected of having a disability will be evaluated in all areas of the suspected disability with assessments that are _____ .
   a. **Nondiscriminatory**
   b. Discriminatory
   c. Predictable

d. Unpredictable

2. A multidisciplinary team, by its name, is made up of a _____ of professionals that can bring their knowledge and expertise to the table in regards to a student with a disability.
   a. Aptitutude
   b. Attitude
   c. **Multitude**
   d. Gratitude
3. The IEP is a written _____ that details the student's strengths and needs in any area affected by the disability and identifies the goals and objectives for improvement in those areas
   a. **Document**
   b. Advancement
   c. Placement
   d. Improvement
4. An IEP should _____be developed prior to the meeting
   a. Always
   b. **Never**
   c. Sometimes
   d. Frequently
5. Parent's _____in the conference increases their awareness of their child's disability
   a. **Participation**
   b. Anticipation
   c. Gratification
   d. Satisfaction
6. Parental _____on IEP team ensures that parents have the right to participate in making decisions regarding the education of their child, including placement decisions and development of the IEP.
   a. Improvement
   b. **Involvement**
   c. Basement

d. Refreshment

7. Involving more professionals is more effective and efficient in providing more _____ information about the student and thus allows these individuals to develop a better plan for him/her to progress in the curriculum and / or prepare for independence in society.
   a. Accurate
   b. False
   c. Estimated
   d. Calculated
8. Research supports that home—school collaboration yields _____results for children
   a. Negative
   b. Normal
   c. Ordinary
   d. Positive

Group B

- Subjective questions

Short answer questions

I. State why interdisciplinary approach is important in special education
II. What does IDEA state about assessment of students with suspected disabilities?
III. Who makes up the multidisciplinary team?
IV. Who make up the IEP team members? Briefly discuss their roles.

Group C

- **Long answer questions**

i. Discuss the historical perspective of interdisciplinary approach.
ii. How does the interdisciplinary team deal with assessment?
iii. Write about the development of the IEP.

UNIT 2

2. Key Related Personnel Involved

2.1 The Role of the School Nurse in Special Education

Nurses have played a key role in schools for over 100 years. In 1902, New York City employed the first school nurses. The initial focus of school nursing was the control of communicable disease and reduction of absenteeism via the promotion of hand hygiene and the appropriate assessment and exclusion of students from school. Lillian Wald a public health nurse, was able to demonstrate that nurses in the schools could reduce absenteeism by 50% (Nies & McEwen 2015) Within 10 years Of the Inception Of nurses into the New York public school system, over 100 cities in America were utilizing school nurses. While the perception Of school nursing may be that Of episodic care consisting Of dispensing band aids and taking temperatures, the role Of the school nurse has evolved to include screening, immunization, case management health education, health promotion, referral active case management, student advocacy, and community liaisons (Nies & McEwen, 2015). According to the American Nurses Association School Nursing, Scope and Standards of Practice (2011), the school nurse is prepared to assess health, diagnose health-related issues, identify desired out- comes, implement

plans, and evaluate outcomes. The school nurse may be the only health care interface for some students and therefore may also function in a primary care provider role. The increased prevalence of chronic diseases in children such as asthma and diabetes has reinforced the need for nurses in schools. Additionally, more children with complex physical behavioral, and developmental needs rely on the school nurse to maximize their potential for an optimal school experience. Despite the many roles that school nurses perform and the vast array of health care services they provide, over one half of schools do not employ a full-time registered nurse (Robert Wood Johnson Foundation 2010).

The National Association Of school Nurses (NASN) (2010) defines school nursing as "a specialized practice of professional nursing that advances the well-being, academic success and lifelong achievement and health of Students.' (p. 2) NASN (2011) describes five core roles that the school nurse fulfills in an effort to promote the health of the children and adolescents as well as academic success. The following roles are universal and applicable to school nurses in all geographies and practice settings:

① School nurses facilitate normal development and positive student response to Interventions;

② School nurses provide leadership promoting health and safety, Including a healthy environment;

③ School nurses provide quality health care and intervene with actual or potential health problems;

④ School nurses use clinical judgment in providing case management services; and

⑤ School nurses actively collaborate with others to build student and family capacity for adaptation, self-management, self-advocacy, and learning.

The American Academy Of Pediatrics (2008) further describes the role of the school nurse in the areas of: provision of care, leadership for health care services, screening and referral for health conditions, promotion of a healthy school environment, health promotion activities, assuming a leadership role for health policies and programs and serving as a liaison between school personnel family, health care professionals, and the community at large. Provision Of care includes care for injures and acute Illnesses for all children as well as the ongoing and long-term management of children with special

needs. Individualized health care plans are developed for children with chronic Illnesses and special needs, and emergency plans are developed to address emergent events such as acute exacerbations of asthma and diabetes and allergic reactions. The nurse IS responsible for the management of the plan as well as communicating the plan to all appropriate school personnel. Leadership for the provision of health services includes the assessment of the overall system of care and the development of an appropriate plan to ensure that all needs are met. Screening and referral for health conditions encompass early identification and referral to the medical home or to the appropriate community resources facilitate optimal health outcomes. Screening should include Vision, hearing, and body mass index (BMI) assessments, but may include other assessments as dictated by population characteristics or local policies. The promotion of a healthy school environment requires the nurse to provide for the physical as well as the emotional safety of the school environment by the continual assessment and monitoring of immunization status, appropriate exclusion for infectious disease and prompt reporting of communicable disease. The nurse monitors the safety of the playground and identifies and corrects potential or actual hazards. The school nurse is involved with the development and implementation of plans for the prevention and management of bullying, School Violence and natural and man - made disasters. The school nurse may also partner with counselors in the development of suicide prevention plans. Finally, in districts where drug testing is incorporated into the school health program, nurses should be involved in the planning, implementation and continual evaluation of testing.

The school nurse promotes health by directly providing health education to students by assisting with health education curriculum development and by providing programming to staff, families and the community at large. Health topics include exercise, nutrition, non-initiation of smoking, oral health prevention of sexually transmitted Infections and pregnancy and substance use and abuse. The nurse serves in a leadership role for health policies and programs by developing and evaluating school health policies. Areas include health promotion, chronic, acute and infectious disease management, school health programs, crisis and disaster management, emergency medical management

and mental health management. The nurse serves as a liaison between school personnel, members of the health care team and the community at large.

The American Academy Of Pediatrics (2008) Policy Statement notes that while there are a variety of roles identified by organizations and schools districts, the minimum of four health services that need to be offered include: 'assessment Of health complaints, medication administration and care for students with special health care needs; a system for managing emergencies and urgent situations; mandated screening programs, verification Of immunizations, and infectious disease reporting; and identification and management Of students' chronic health care needs that affect educational achievement' (p 1054).

Strong relationships between the interdisciplinary team caring for children are of paramount Importance (American Academy of Pediatrics (AAP) 2008). This team consists of School nurses, school physicians, Other school health personnel and pediatricians who strive to provide optimal care for children and youth by facilitating the development of a coordinated School health program facilitating access to a medical home for each child, and integrating health, education and social services for children at the community level" (AAP 2008 p. 1054). The AAP (2008) supports the position that every sd1001 should employ a full-time nurse to ensure an optimal connection with each child's medical home and endorses the Healthy People 2020 goal that School districts should employ a minimum of one nurse per 750 students depending on the composition and needs of the community and student population. The ratio should be amended in schools with higher percentages of students with special needs. In those instances, the recommended ratios are 1 nurse for every 225 students when daily professional nursing services or interventions are provided and 1 nurse for every 125 students when complex health needs must be addressed.

The primary goal in school nursing is education of students. Student health status is directly related to his or her ability to learn (NASN, 2011). Therefore it is the responsibility of the school nurse to advocate for and work with students and families in an effort to have children in school and ready to learn. Contemporary health issues facing children and adolescents in the US are different from those of previous generations and many as associated with the leading causes of death such as cardiovascular disease, cancer and injuries (Center for Disease Control and

Prevention, 2014 a, 2014 b). An increase in asthma, obesity, diabetes, autism, epilepsy, mental health issues, allergies, and other chronic diseases have created a challenge to the health of children. With over 50 million children in attendance in schools in the US and approximately 60,000 nurses employed by schools, nurses are in an ideal position to intervene and positively impact children and their families' lives (Nies & McEwan, 2015).

The provision of professional nursing services is crucial in order for Students with special needs to progress in the educational system. Public Law 94-142 (Education of All Handicapped Children Act), now known as IDEA (Individuals with Disabilities Education Act), mandates nurses to identify children who require special education and related services and complete an IEP created by an interdisciplinary team. All provisions and services required for the child to participate and benefit from school are included. The nurse must also develop an individualized health plan for students who require the provision of nursing care during the course of the School day (Nies & McEwen 2015). The role of the school nurse has become Vital in the special education classroom. A qualified RN may participate as a member of the special education team. Whether student eligibility is being sought under Section 504 or IDEA, it is Important that there be a complete assessment of the student's physical health status. The RN is not qualified to complete the medical assessment, but is key in Interpreting and sharing the medical and health information that Impacts the students in the sd1001 environment (School Nurse Organization of Minnesota (SNOM), 2014). The school nurse can be the fundamental link between the medical and educational communities (Zirkel, Granthom & Lovato 2012) and can assist in completing the evaluation report. The school nurse may serve as a member on the IEP and 504 teams in the role of health expert. Serving in the role of case manager for students with health care needs, the nurse ensures there is adequate communication and collaboration among all members of the interdisciplinary team family and providers of community resources in order to facilitate appropriate and consistent care (AAP 2008).

Development of the IEP should be a cross-disciplinary collaborative effort. The School nurse is able to interpret health findings and integrate health accommodations into the plan. Further, the nurse must plan for implementation Of the IEP health components. Expertise or training for all those Involved must be accomplished. For example, a child

with diabetes had an accommodation for use of an insulin pump and blood testing (Zirkel et al. 2012). The School nurse could monitor the student and the blood testing, plan for training faculty and staff in care Of the diabetic child, develop policy and procedure for handling emergency situations related to the diabetic child and serve as a liaison between the school and parents/medical professionals caring for the child. In this case having the school nurse help with and plan reasonable accommodations could decrease adverse diabetic reactions, keeping the child in class and making academic progress.

2.2 The Role of Art Therapists in Maximizing the Mental Health and Potential of Learners with Special Needs

The relationship between learning and mental health, as well as a growing body of literature, underscores the need for art therapy in educational settings. This is particularly true for learners with special needs. Shostak et al. (1985) affirmed that "for children with special needs, art therapy in a school setting can offer opportunities to work through obstacles that impede educational success" (p. 19).

School art therapy facilitates improved social interaction, increased learning behaviors, appropriate affective development, and increased empathy and personal well-being. It can be adapted to meet the specific developmental needs of individual students and to parallel students' developmental, learning, and behavioral objectives.

Though it can be used with people of all ages, children in special education services will be the primary group addressed here. Children are encouraged to express their feelings through the art that they create in their session. In addition, they have the chance to learn social skills, gain cognitive growth, obtain coping mechanisms through the resolution of frustration and practice sensorimotor skills such as sensory stimulation and hand-eye coordination. In addition, practical skills are learned such as how to find and put away art supplies, ways in which to utilize certain tools and the importance of putting away their supplies and cleaning themselves up. The kinds of artwork done by students in this type of therapeutic situation are quite varied. They may include making collages, drawing pictures, painting murals, crafting puppets and creating sculptures, among a myriad of other activities. All of these are ways for the child to express their feelings and to provide information indirectly to the therapist.

Art therapists are the professionals who guide the child in this particular mode of therapy. They are Masters-level professionals who have extensive knowledge of, and are able to practice, counseling theories and techniques with people of all ages, in a variety of settings including schools. The responsibility of an Art Therapist is to help students express and contain their internal conflicts, while facilitating their ability to implement change. School Art Therapists collaborate with the teaching and counseling staff as well as parents, to establish treatment goals and objectives that are appropriate within a school system. They offer both individual and group counseling. Art Therapy in schools is generally used for special education students who have difficulty in the setting as a result of learning disabilities, behavior disorders, emotional disturbances, or physical handicaps which impair gross and fine motor control. An initial AT assessment is a primary part of this process, in which a student's strengths and weaknesses are explored. Typically, an Art Therapy assessment involves the therapist's giving the client a series of five or six art tasks, using a variety of media. These tasks relate to the

student's perception of self, his or her family, and school, or other aspects of their environment. These drawings and the student's behavior while approaching this task are then evaluated along with developmental, family, and academic history. It is important to note that children's progress in drawing differs significantly across the cultural spectrum. A person who uses art as an assessment tool needs to be familiar with the art children are exposed to and the culture they are from, before making an evaluation.

Art therapy can help special needs children in a variety of circumstances and conditions, including but not limited to the following:

- Mental health problems in children
- Child grief
- Bereaved children and/or a child suffering from bereavement
- Children with learning disabilities
- Children with emotional problems
- Children with their cognitive abilities
- Help a child or children with abuse, helping them communicate about physical or sexual abuse
- Help a child coping with cancer

Those are just a few aspects in which art therapy can help children. Art therapy can also aid a child in achieving better self-awareness, relief from stress or anxiety, learning disorders, autism, and other traumatic experiences. Through art therapy, children receive treatment that is based on their existing strengths, weaknesses, interests, and concerns. It can help children of all ages and races.

Art therapy for children can provide children with an easier way to express themselves since children are more naturally artistic and creative. A young child is likely to be more comfortable initially expressing him/herself with some crayons and markers, for example, than he/she is going to be at expressing emotions and feelings through words.

For a child with special needs, expressive art can foster relaxation, focus and a sense of accomplishment while working on a creative project. The arts are an increasingly

popular way for children with special needs to overcome difficulties and take pride in a new skill.

It's important to have patience when helping special needs students with art projects. Reacting with impatience may cause the special needs child undue anxiety and make the task far less pleasurable. Make the point of the art activity the actual process rather than the finished result. Letting the child know that his/her artwork is special and unique throughout the process can help them become more confident.

Engaging in art time is no time for overly strict rules. Children often grow used to being instructed not to make a mess. At art time, these rules should be relaxed and they should be free of worrying about spilling a drop of glue or splattering some paint. However, take precautions and cover clothing and surfaces, but strive to make the experience fun and worry about any mess later.

Allow plenty of time for the art project. Rushing will only cause the students anxiety. They may experience frustration when they are not able to perform fast enough, making them reluctant to participate again. They may feel disappointed if they are unable to finish the projects they've put loving effort into doing. Always compliment the special needs student on their artwork. Generally, students are eager to please their teachers, and a few kind words can boost their self-esteem and give them an overall sense of accomplishment that may spread to other subjects.

Start with simple projects, like handprint painting, simple crafts and finger-painting. Use clay and offer the children different shapes and textured materials they can glue onto paper or cardboard. Introduce more complex projects when it is seen that the children are ready for them. Make art expression a time for fun learning that will inspire and provide creative outlets for special needs children.

Here are some simple steps to help teachers adapt art projects for children with special needs:

- Modify art supplies to accommodate the child's capabilities
- Engage children in group activities

- Accommodate each individual
- Allow time to finish an activity

2.3 The Role of Physical Therapists in Advancing Special Education

Children must meet various physical demands during the school day in order to be successful from both an educational and a social standpoint. They use important motor skills to move in the halls, sit quietly at a desk, and participate with peers on the playground.

Physical therapists play an important role in facilitating the development of motor skills in order to allow for optimal participation and socialization for each student. The physical therapist may provide direct service to children receiving related services, indirect service to teachers and other staff by providing instruction or recommendations for children within the classroom setting, and consultation for staff and administration addressing issues that affect the student population as a whole. Their primary focus is on the rehabilitation and treatment of physical disorders that affect functional ability, general mobility and potential movement, all of which can improve quality of life for your child with special needs. Physical therapists are in charge of the assessment, diagnosis and treatment of a child's condition from newborn all the way through high school, should the child still require specialized services.

A physical therapist might assist the parents of the child with the burn by showing them how to carry and safely bathe the child. The therapist also works with the youngster's muscles to ease them back into movement. The student with muscular dystrophy would benefit from practice learning how to safely get in and out of his classroom chair, to use a wheelchair independently on the playground and school field trips, and to participate in modified physical education activities. After evaluating the teenager with cerebral palsy in the community and at the vocational site, the school physical therapist recommends necessary architectural changes and transportation modifications to make the job site more accessible, and helps the student learn proper positioning techniques to use when sitting for long periods of time. They may prescribe specific exercises to help a child increase control of muscles and use specialized equipment, such as braces, effectively. Massage and prescriptive exercises are perhaps the most frequently applied procedures; but physical therapy can also include swimming, heat treatment, special positioning for feeding and toileting, and other techniques. PTs encourage children to be as motorically independent as possible; help develop muscular function; and reduce pain, discomfort, or long-term physical damage. They may also suggest dos and don'ts for sitting positions and activities in the classroom and may devise exercise or play programs that children with and without disabilities can enjoy together.

Every day, almost one million Americans, some of them children are treated by physical therapists in hospitals, clinics, health agencies, and private practices. Children can also receive physical therapy in schools or homes. Of the approximately 90,000 active physical therapists in the United States, three percent are employed by schools. Through the federal law called Individuals with Disabilities Education Act, these professionals serve infants and toddlers in their home or day care and provide services to students ages 3-21 in education settings including preschools, schools, and vocational-training sites.

There are many specific specialties that branch out from a general physical therapist – these can include focus on neurological disorders, pediatric concerns or orthopedic issues from either congenital causes or outside sources, such as an unexpected accident. For diagnosis, all available sources of medical information concerning the child with special needs will be considered so a proper treatment plan can be established. They might suggest actions such as exercise, controlled motor functions or strength training to help overcome obstacles to physical wellness; each plan is tailored to the individual child so as to accommodate for their specific needs and unique abilities.

Physical therapy builds on a patient's strengths and abilities. A therapy program will focus on improving the patient's functional or educational skills. Therapy sessions may include: initial testing to learn about the patient's needs, regularly scheduled treatment with a physical therapist to work on mobility skills, strengthening exercises or stretching exercises, teaching your family about the patient's therapy so practice can be done at home, home visits to see if equipment is needed to make caring for the patient easier.'

The need for therapy changes for each patient over time, and services are provided to meet the individual needs of each patient. Patients are sometimes ready to acquire new skills and sometimes need the help of their family and care-givers to practice skills that are developing more slowly.

Physical therapists, families, patients, teachers and physicians work together to jointly determine goals and provide the most appropriate therapy program for each individual

patient. School-based physical therapists work with other professionals to help students with disabilities to benefit from special education. This includes activities of a school day, like: moving throughout school grounds, sitting, standing in line or at the board, moving in class or through the building. All screens, evaluations, consultations, and interventions are performed by licensed physical therapists. Interventions may include adaptations to school environments, working with a student on motor skills, assistance with identifying and getting special equipment, and collaboration with school staff and other professionals.

All children, who qualify for clinical (or outpatient) physical therapy, may not qualify for school-based services. A child's eligibility for services is determined by a multidisciplinary team that includes parents, educators, program facilitators, the student and other special service providers. The team gathers information about a child's functional abilities and physical development relevant to their education. This information comes from a variety of sources including parents or caregivers, direct observation, medical and teacher reports, assessment tools, and information or input from community agencies. Recommendations for education based services, including physical therapy, are based upon a thorough review of available information. Findings are shared with team which uses the information and recommendations to develop an Individual Education Program or IEP.

A family can prepare for their initial therapy assessment by considering what it is that they would like for their child to be able to accomplish over the next six months or year and discussing with the therapist what is the expected outcome of the therapy sessions. Therapy does not necessarily change the outcome or course of the disability; however, new therapies are constantly being developed. The goal is to help each patient be as independent as they can be and assist each family in achieving a greater understanding of the patient's disability and adapting to the life changes that their unique situation may require.

2.4 Role of Speech-Language Pathologists in Special Education

A speech pathologist is a trained medical professional who can help children with a number of oral disorders such as trouble swallowing, motor skills, speech issues, cognitive-linguistic conditions and language. Their role is to help assess a condition, diagnose specifically what the issue is and develop a plan to help treat the disorder, and then follow through with therapy and other methods to ensure the child with special needs is getting the help they need. Speech issues are sometimes caused by neurological damage or impairment from an extenuating circumstance, like a sudden disease or accident, while others are inherently present from birth. No matter the reason for the issue, a speech pathologist is trained to handle whatever issues they might be presented with.

After a diagnosis is made and a course of treatment agreed upon, a speech pathologist will work closely with the affected child to correct the issue as best as possible. They help to correct speech sounds, how language is perceived in children with developmental disabilities, stuttering and other disorders such as speaking in a harsh or inappropriate tone during certain moments. No matter the need for speech therapy, this specialized pathologist can help children succeed in changing their speech habits for the better.

Speech/Language Pathologists serve special needs children and their parents in a myriad of ways. The earlier the intervention the better the outcome, and the less likely non-verbal habits will develop which will later have to be unlearned. The speech language pathologist focuses on areas of communication that include, but are not limited to:

- oral motor,
- speech,
- language (receptive and expressive),
- voicing,
- swallowing and feeding,
- alternatives to verbal communication,
- And auditory comprehension skills.

Early on, speech/language pathologists help children to develop the important pre-learning skills of listening, attending, responding and connecting of daily life experiences with language and communicative output. Improving and increasing communication skills often reduce behaviors that impede successful interactions and improve overall learning skills.

Each therapist has a different technique and the personality of the therapy itself varies. The clinical, eclectic, and academic background of the therapist will support the type of therapy an individual will receive. Speech/ language pathologists in private practice must have a Certificate of Clinical Competence from the American, Speech, Language & Hearing Association (ASHA) and maintain ethical practices as outlined by ASHA.

If a child with special needs attends a school with active special education services, it's likely there is a speech-language pathologist (SLP) available to assist with the child's unique disorder. These therapists work in a public school setting to assist those children whose speech impairments affect their ability to perform well in the classroom, social activities and overall literacy levels. A disability of this nature can be understandably

scary and frustrating for the child, which is why SLPs often see children in a contained environment for personal attention and learning.

School-based speech pathology services are only provided once a child has been evaluated and diagnosed with a speech disorder, and it has been proven that their disability will immediately impact their continued educational success. Once an SLP has been brought in to assist the child with special needs, they will work closely with both the parents and the school to communicate therapeutic plans and goals, continued progress or setbacks and general information or resources. They will help the child get the educational support needed for a bright future.

SLPs often participate in all phases of early intervention from screening to diagnosis, intervention planning and implementation, and monitoring and making adaptations to meet the child and family's changing needs. SLPs contribute specialized knowledge and skills related to communication, language, speech, feeding, swallowing, and augmentative and alternative communication. Their roles may vary from limited interactions such as consulting with other professionals or the family to serving as a primary service provider. To provide the most effective services to children and families, SLPs use the best available research evidence, along with clinician and family wisdom, values, and beliefs, to guide decision making in all phases of early intervention.

The school's SLP is required to be present during the creation of an IEP, as their intimate working knowledge of the specific condition provides valuable insight into how the disorder should be managed and what outcome to expect from treatment.

To understand the educational impact of the speech-language difficulties—that is, to relate the child's communication needs to the academic curriculum—the SLP should have a thorough knowledge of state educational standards (Power-de Fur, 2010). In addition, the clinician should be familiar with the services provided in other special education programs in the school, as many of these services provide language-rich environments for children (e.g., early childhood special education, programs for children with autism).

The SLP similarly should be mindful of the communication standard within the child's community. Clinicians should review standardized assessments to ensure the standardization of the sample is comparable to the school community. If not, the assessment can be used for descriptive purposes, but standardized scores should not be used, as the scores may inappropriately penalize the child for using speech-language structures that were not accounted for in the standardization. Clinicians frequently must modify administration of the assessments (e.g., use of an interpreter, presentation in sign language, use of multiple sessions, or use of selected subtests). In these situations, the report must clearly describe how the administration varied from standard administration, and standardized scores may not be used.

IDEA increasingly has encouraged use of intervention prior to determination of eligibility, a process known as response-to-intervention (RTI). SLPs have provided a variety of RTI services, including language enrichment in the classroom or remediation of mild speech-sound disorders. These interventions provide the eligibility committee with rich data to use in its eligibility determination based on the dynamic assessment process incorporated into RTI (ASHA, 2006).

The relationship between language and cognition has long been a challenging issue for interdisciplinary teams. "Cognitive referencing" has been widely used in the past, excluding students from eligibility when their language and cognitive scores are commensurate. There is no valid research comparing language and cognitive assessments; research indicates that language may surpass cognition (ASHA, 1999). When assessing students with intellectual disabilities, the interdisciplinary team should use non-standardized measures of functional communication to obtain an accurate picture of the effect of the speech-language impairment on the child's educational and functional performance.

Speech-language impairments are unique in that IDEA views speech-language services as both special education and as related services. A child may be eligible for additional services ("related services") if the services "are required to assist a child with a disability to benefit from special education…" (34 C.F.R. Section 300.34). Although a child may

benefit from a related service, the child will not be eligible to receive that service if the child can perform academically without it.

For example, a child can benefit from instruction from an occupational therapist in holding a pencil, but if that instruction is not necessary to progress in his/her elementary classroom, the child is not eligible. Conversely, it is reasonable that a child whose primary disability is a learning disability receive speech-language services as a related service. Because of the close relationship between oral and written language, it is highly likely that the child will need a related service (speech-language services) to benefit from the learning disability services. Similarly, a child with an emotional disturbance who has difficulty with social communication also may need speech-language services to benefit from his or her primary special education service. These children are often referred to as receiving “speech as a related service.”

Although the U.S. Department of Education counts children with disabilities by primary disability, it does not prohibit counting of secondary or tertiary disabilities. The presence of speech-language impairments as secondary and tertiary disabilities (typically children receiving “speech as a related service”) account for approximately half of the children receiving speech-language services through special education. The child’s parent must consent to the identification of the child as a student with a disability who is in need of special education services. Although IDEA does not require parental consent to find a child no longer eligible for special education, some states and localities may require parents to agree before a child is exited from services.

2.5 The Role of Special Music Educators And Music Therapists In Assisting Exceptional Learners

Music therapy has proven to be effective in special education for students with various types of disabilities and special needs. This type of therapy can be used in different ways, depending on each individual child. This type of therapy focuses on using music as a way to address the physical, cognitive, emotional, and social needs of a child. It is important to note that this form of therapy is not provided by just anyone who knows about music. These therapists must attain a bachelor's degree from one of 72 accredited schools and 1200 hours of clinical training. Music therapists must also have the required credentials and licenses. Just like with any type of therapist, the student's strengths and weaknesses are assessed to determine the type of treatment. This treatment can involve singing, listening to music, moving to music, creating music and using various instruments, rhythms and sounds. Research has shown the effectiveness of this type of therapy in many areas including:

- facilitating movement
- providing avenues of communication

- increasing motivation
- providing a way to express feelings

Therapy set to music can be effective in various environments including schools, in the home, hospitals, and can be done in groups or individually. Music therapy in special education is the functional use of music to achieve special education goals. A range of music therapy techniques are used to achieve these goals, for example, improvised music, instrumental playing, singing, music listening, music and movement, substitution of lyrics in known songs, song writing, and composition (Boxill, 1985; Davis, 1992; Gfeller, 1992b; Jellison, 1988; Lathom, 1980; Thaut, 1992). Music therapy techniques used in the area of special education can be divided into four areas. These are improvisatory, re-creative, receptive, and creative techniques (Bruscia, 1989). Improvisatory techniques entail the making of music in the moment by the student and/or therapist. Both instrumental and vocal improvisation may be used depending on the abilities of the student and the goals of the program. This technique is particularly useful when working with students who have mild impairments. Frequently goals such as increasing self-esteem, developing an awareness of self, and self-expression can be realized when using improvisatory techniques.

Re-creative techniques entail the student recreating a pre-composed work, experience, musical story, or event. This may occur independently or with the assistance of the music therapist. The student is required to create a piece, work, or experience when creative techniques are used. This technique is usually used with students who are able to work independently. Re-creative techniques involve the repetition of newly acquired information while creative techniques assist in the acquisition of particular skills. Receptive techniques involve the student in a receptive or passive manner. For example, the student may be required to receive musical sensations, vibrations, pieces, and experiences. An example of the use of this technique is where the student is required to listen to pre-recorded material brought by the therapist to a session. These programs are traditionally used with students who have severe disabilities.

It is not simply the application of these techniques which makes the process a music therapy process. Rather it is the application of these techniques, in response to student

needs, by a trained, qualified, and registered music therapist. Registered music therapists are skilled and qualified musicians and therapists. Music therapists assess the needs of individuals and groups referred to the music therapy service and are able to design and implement programs to meet these needs. The music therapist then evaluates the outcomes of the program.

It is important to note that therapy using music is not meant to replace a child's special education curriculum, but instead it is intended to complement it. According to various research, there are proven connections in the following areas:

- singing and speech
- rhythm and motor skills
- lyric memorization and memorizing academic material
- listening and increased focus

Music has also proven to help students with special needs behave appropriately, interact with others, relax the muscles and provide a distraction from pain, anxiety and discomfort. When recognized as a related service, therapy associated with music can help students with special needs to meet educational goals as set by their Individualized Education Program (IEP). The benefits of using music with students receiving special education services are extensive and unique. Music therapy enhances special education goals and objectives while offering an alternative to traditional teaching methods (Alley, 1979). Music therapy programs can be structured to complement student Individual Education Plan goals (Alley, 1979; Lathom, 1980; Shoemark, 1991). Music therapy can also be applied in group or individual contexts for the enhancement of goals in special education (Krout, 1987). The overall aims of music education and music therapy are complementary, that is, to facilitate the growth and development of the student (Alley, 1979). It can be argued that the difference between music education and music therapy in the special education setting is that music educators specialise in students' acquisition of musical knowledge, skills, and appreciation while music therapists use music primarily to achieve non-music goals (Wilson, 1991).

There are many disabilities and types of special needs in which music has been proven to be helpful. Some of these include:

- Autism
- cerebral palsy
- childhood apraxia of speech (CAS)
- learning disabilities (LD)
- asthma

Other instances where this type of therapy can be beneficial include students who struggle with depression, attention deficit hyperactivity disorder (ADHD), anxiety and those who lack self-confidence.

Music therapy provides a way for some children with certain disabilities to learn in ways they never have before. For this reason and many others, this type of therapy is extremely effective.

2.6 Role of Adapted Physical Education Specialists

Adapted physical education (APE) is the art and science of developing, implementing, and monitoring a carefully designed physical education instructional program for a

learner with a disability, based on a comprehensive assessment, to give the learner the skills necessary for a lifetime of rich leisure, recreation, and sport experiences to enhance physical fitness and wellness. Adapted physical education generally refers to school-based programs for students ages 3–21.

Federal law mandates that physical education be provided to students with disabilities. Physical Education is defined as the development of physical and motor skills, fundamental motor skills and patterns, skills in aquatics, dance and individual and group games and sports; including intramural and lifetime sports. The history of Adapted Physical Education began with the implementation of P.L. 94–142 in 1975. This act recognized physical education as a direct service. Specially designed physical education programs must be made available to every handicapped child receiving a Free, Appropriate Public Education (FAPE). The Americans with Disabilities Act (ADA) was enacted in 1990 to prohibit the discrimination of individuals with disabilities in the public and private sectors. The ADA outlaws discrimination against a person with a disability in five spheres: employment, public services, transportation, public accommodations, and telecommunications. ADA requires accessibility in physical education facilities. Examples include: Weight rooms that accommodate wheelchair users, gym lockers that use combination locks, playgrounds surrounded by a fence, and well lighted gymnasiums to aid students with visual impairments. Enacted in 1990 (and reauthorized in 1997 and 2004), IDEA was the reauthorization of PL 94–142 and continued the emphasis upon FAPE, IEP, LRE, and physical education as a direct educational service. With this reauthorization, person-first terminology was instituted, and emphasis was placed on the education of students with disabilities within the general curriculum and parent involvement in educational programming. Under Federal Law, in order to qualify for this special education programming, students must fall within one of the thirteen disability categories identified under IDEA and demonstrate an academic need.

Adapted Physical Education Specialists provide individualized physical education instruction or services to children, youth, or adults with exceptional physical needs due to gross motor developmental delays or other impairments.

What They Do

- Maintain inventory of instructional equipment, materials, or aids.
- Request or order physical education equipment, following standard procedures.
- Review adapted physical education programs or practices to ensure compliance with government or other regulations.
- Attend in-service training, workshops, or meetings to keep abreast of current practices or trends in adapted physical education.
- Advise education professionals of students' physical abilities or disabilities and the accommodations required to enhance their school performance.
- Write reports to summarize student performance, social growth, or physical development.
- Communicate behavioral observations and student progress reports to students, parents, teachers, or administrators.
- Evaluate the motor needs of individual students to determine their need for adapted physical education services.
- Write or modify individualized education plans (IEPs) for students with intellectual or physical disabilities.
- Provide individual or small groups of students with adapted physical education instruction that meets desired physical needs or goals.

If a student is receiving adapted physical education services, it must be identified on the IEP and APE goals should be developed and implemented. IEPs are revised once a year by an IEP team. Individuals with an IEP should receive a reevaluation every three years. IEP's are developed by the IEP team and based on comprehensive assessment as outlined by guidelines established in IDEA. Decisions based on IDEA qualifications are generally discussed and determined during an Individual Education Plan (IEP) meeting. IEP recommendations for services and supports must consider a student's unique needs, as well as the Least Restrictive Environment (LRE).” The LRE will be based upon the assessment process and where the IEP goals can best be met. There are a variety of placement option which should be considered including:

- Full-time General PE (GPE)

- General PE with a younger class
- Part-time Adapted PE (GPE for some units or parts of a lesson)
- Reverse Mainstreaming
- Small Group or One on One PE
- Separate School
- Home/Hospital

With the development of new and improved technology with physical education, and especially adapted physical education, it is important for the APE teacher to know and understand different ways to implement technology for increased success for their students. APE teachers can develop an updated website regarding a fitness workout plan, in which students can download and follow at home with a sibling or parent. Students can be taught how to keep track of their physical fitness goals and record the data on a spreadsheet. Video files can also be used to demonstrate proper technique. Teachers can easily create videos of students doing an activity and download them onto an iPod or computer so students have an easily accessible reference to use during transition periods or after they graduate. Video files or iMovies can be utilized as report cards or as evidence of IEP goal attainment. In APE pedometers can easily be introduced into any lesson and taught how to use and how to keep track of steps. Teachers can also play appropriate and motivating music for aerobic activities. Video games are also starting to become more and more predominant in physical education classes, such games can be used outside of school as well. Some games are particularly accessible for individuals with disabilities including Wii and Eye Toy Play. New applications (Apps) are constantly being created to assist people with disabilities in numerous ways. With technology growing, APE teachers need to continue to develop as professionals in providing new ways to enhance their student's physical development.

Teaching for specific disabilities

- Intellectual Disabilities**:** There are a number of general modifications that can be applied in a physical education environment for students with intellectual disabilities. The first set of modifications deal with communication. When instructing students use shorter sentences, use gestures or demonstrations as

supplement to verbal cues, repeat directions and have students repeat directions back to you, provide praise often, and give more feedback. The next set of modifications deal with practice. Give students extra practice trials, build in more time for a student to master skills, make sure activities are perceived as fun, promote active participation, shorten activities to reduce problems with attention span, and allow choices in what activity will be done, when it will be done, where it will take place, and with whom the child will participate in the activity with. One method to structure activities is known as level teaching. To accommodate for students with varying levels of intellectual disabilities a game will be designed with different levels. For example, if the specific sport is volleyball the instructor will set up 3 courts with different modifications at each court to accommodate for these varying levels of disability. Court 1 may have a set of cones designating opposing sides while Court 3 has a net set in place. Different rules may be applied to different courts as well, allowing every student to be challenged in a constructive way. The third set of modifications deal with curriculum. Adjust the general education curriculum to meet the needs of a student. For example, reduce the number of objectives that need to be mastered. If a student is severely delayed, an entirely new curriculum may need to be made. Activities may also need to provide early success which will encourage adherence. The final set of modifications deal with the environment. It should be structured and visually appealing. It is essential to reduce playing areas in order to eliminate distractions. Plan to structure the environment in a way that will allow you to deal with behavioral problems.

- Learning disabilities: 1 in 5 students with learning disabilities will also have motor impairments. There are a number of ways to accommodate these students.
    - Reduce class size: This allows teacher extra one on one time with students. Often a class of 20-30 students proves to be more effective than double or triple that in general physical education classes.
    - Use peer tutors: Peers can be rained in how to provide specific skill feedback as well as modify activities so the student has higher success. This can be effective when class size cannot be reduced.

- Offer learning strategies: Both teachers and peer tutors can provide strategies to help disorganized learners focus. This includes provided picture cues, video cues, and additional cues such as footprints on the floor to help a student understand what and how to perform an activity.
- Provide structured practice: Allow the student to get many practice opportunities. This will help them learn how to listen to and observe visual feedback for performance.
- Identify success: Reframe success for students in a way that does not focus on the end result. For example, using correct form in shooting should be a measure of success rather than making the basket.
- Use a variety of senses when giving instructions: Some students do better listening to instruction while others do better watching a demonstration. Others may do best when physically guided into the pattern. By incorporating many types of learning styles, students will be more likely to succeed.

- ADHD: Students with attention-deficit/hyperactivity disorder may experience motor learning delays. Many strategies are available to minimize learning delays in students with ADHD.
  - Positive feedback: There is a relationship between positive feedback given by a physical education teacher and students applying corrective feedback.
  - Task sheets: A task sheet provides a progression of activities to be completed by the students and requires them to record their results. Task sheets can be turned in at the end of class. This allows students to assess their performance while acknowledging their need to improve their skills.
  - Token economy or point system: This is a structured agreement between the student and teacher in which the student earns rewards by meeting a minimum expectation. At the end of class both the student and teacher initial the points earned. At the end of the month, the student may earn a reward of his or her choice provided by the teacher.

- Autism spectrum disorder: Various strategies exist to allow students with autism to be successfully included in a physical education setting.
    - Preparing for inclusion: It is essential to know the students needs, abilities, and preferences. It is also important to prepare the student. The physical education environment may be anxiety inducing for them. Because of this, educators can slowly introduce the student to the environment. They may also preview the class using visual organizers to describe the setting the student will be a part of. They may also make visual schedules prior to class. It is also important to prepare the peers by teaching them what autism is and behaviors associated with it.
    - Instructing the student: There are a variety of methods for instructing students with autism. The first, environmental prompts. This involves the intentional use of equipment to encourage specific behaviors. The next is verbal prompts. This includes avoiding negative sentences. For example, instruction such as "step with your right leg" as opposed to "don't step with your left leg". Verbal prompts also include keeping phrases literal as well as provided concise instruction. It is also important to be consistent with language use. Peer tutors may also provide a lot of benefits for students in the physical education setting.
- Deafness: Being deaf or hard of hearing typically has little impact on the development of motor skills, fitness levels, and participation in sports. However, it is still important to accommodate students who are deaf or hard of hearing in the physical education setting. Communicate using his or her preferred means of communication. When giving verbal instructions, make sure the student can see the instructors face clearly. Make sure you speak clearly and at a normal rate. Incorporate visual aids that have images or descriptive words. Repeat comments or questions made by the student's classmates. This helps all students alike. Check for understanding by asking students to repeat directions or demonstrate a skill. If an interpreter is involved, make sure to speak directly to the student, rather than the interpreter.
- Visual impairments: Children with visual impairments can play all of the same sports as their sighted peers, with some modifications. This may include a

beeping ball or allowing blind player to walk around and feel the environment before they begin. Modifications can be made continuously until the best solution is found. Children with visual impairments and blindness may need more instruction and practice time to learn new concepts and movements. It is suggested that students receive pre-teaching before the start of a new unit. This can be done before school, after school, during orientation, or at home. Peer tutors may also be effective for students with visual impairments or blindness.

2.7 Roles of Various Professionals Related to the Education of Deaf, Hard of Hearing Students

The professionals who will play a part in the management of a child's hearing loss should be thought of as members of the child's team of experts. Parents will probably meet the members of the team in the following order:

- a health professional (pediatrician, family doctor, or public health nurse),
- an audiologist,
- an otorhinolaryngologist (ENT doctor)
- a service coordinator,
- a speech and language pathologist,
- a teacher of the deaf or hard of hearing, and/or
- a regular classroom teacher.

The role of each member on the team are as follows:

The health professional on whom parents depend for the general health care of parents child, is probably a **pediatrician**, who treats only children, or a family practice physician, who treats adults as well as children in the family. This professional will not be able to help parents with the hearing loss itself. However he/she may treat inflammations and infections of the ear and upper respiratory system that can affect hearing, as well as other conditions that children may encounter.

The **audiologist** must have a license in audiology, and be certified by the American Speech-Language-Hearing Association (ASHA). He/She specializes in the study of hearing disorders. An audiologist identifies the hearing loss, measures it, and aids in the habilitation of the deaf and/or hard of hearing person, by recommending appropriate hearing aids. Most are also licensed to sell hearing aids.

An **otorhinolaryngologis**t is a physician who specializes in diseases of the ear, nose, and throat. He/She may also be called an otologist or an ENT doctor. By federal regulation, he/she must examine a child to rule out any medical complications before parents purchase a hearing aid. An ENT should check every child periodically. Some of these doctors also dispense hearing aids.

The **service coordinator** is responsible for coordinating all services for the child and will serve as the person for parents to contact when seeking to obtain necessary services and assistance. The service coordinator is also required to assist parents in identifying and locating available services and service providers, and to inform parents (and families) of the availability of advocacy services.

A **speech and language pathologist** specializes in the diagnosis and habilitation of speech and language problems. This team member may meet with a child on a regular basis to work on the fine points of speech and language development and speech correction. He/She will explain how parents can help with the child's speech and

language development. Most states require the American Speech-Language-Hearing Association (ASHA) certifies licensing of these professionals.

The **teacher of the deaf or hard of hearing** should be certified by the State Department of Education to teach students who are deaf or hard of hearing. Parents should begin talking to these special teachers, from programs in their area, even if the child is only an infant. This person can help parents get started immediately with communication and language development, even if the hearing aids have not yet arrived. Most areas have programs for infants and toddlers and their parents. Teachers in these programs will become one of the most valuable members of the team, providing home visits and one-on-one early intervention for parents and children.

2.8 Roles of Nutritionists/ Dieticians in Assisting Special Learners

The treatment and care of persons with a disability should and must be all encompassing. With the expansion of the knowledge that proper dieting can make a difference in the individual's development and quality of life, attention must be focused on using proper food intake to remediate the negative impact of a disability. Food is related to proper healthcare; therefore, we must include proper nutrition in

working with learners with exceptionalities. We must add to the list of treatments not only educational intervention, social interaction, and independent living, but also food intake.

A school nutrition practitioner is defined as an individual possessing a food and nutrition degree working in a school nutrition program; specific job titles include director, manager, supervisor and nutrition education specialist (ADA, 2010a). The financial challenges of operating a school nutrition program under current regulations have become considerable. The school nutrition program administration requires staff supervision and compliance with local, state and federal regulations, while meeting the needs of a diverse student population with varied nutritional needs--including medical/nutritional requirements of students with disabilities and special needs. Maintaining food safety is another important responsibility of program administrators (ADA, 2010a).

Students' nutritional status, health and academic performance improved when nutritional services were integrated into school health programs. School nutrition services targeting kindergarten through 12th grade students should include nutrition education and promotion, campus food and nutrition programs, community partnerships and nutrition-health related services (ADA, 2010b). Nutrition education in the classroom, combined with availability of school-provided healthy food choices and support from outside the school environment, has positively impacted children's eating habits. The CDC (2013) recommends eight components of coordinated school health which include physical and health education, counseling, nutrition and health services, psychological and social services, staff health promotion, safe and healthy school environment, and family/community involvement. The Institute of Medicine (2008) recommended that school authorities educate students about healthful diets and incorporate nutrition education into the school environment.

National professional standards founded on research were recommended by the School Nutrition Association (2009) for state agency directors, school nutrition directors, school cafeteria managers and school nutrition employees. These standards, in conjunction with the development of operating standards, would help strengthen school nutrition programs. The proposed credentials make recommendations for specific educational

requirements for state agency directors, school nutrition directors, as well as managers and employees. These credentials take into consideration the district 18 student enrollment and provide education standards, along with continuing education requirements for all of these personnel (USDA, 2014).

Nettles, Carr, and Asperin (2009) developed the Competencies, Knowledge, and Skills for District-Level School Nutrition Professionals in the 21st Century for the National Food Service Management Institute. Nettles et al. (2009) provide ten functional categories for the job responsibilities for district level school nutrition professionals. The ten categories included

i. management of facilities and equipment,
ii. financial management,
iii. operational management including food production,
iv. food safety/security and sanitation,
v. human resource management,
vi. procurement and inventory management,
vii. management of menu and nutrition,
viii. marketing and communication,
ix. program accountability and management,
x. and the technology and information system responsibilities (Nettles et al., 2009).

Leadership responsibilities would include procurement, menu and nutrition management, food safety/security and sanitation, financial management, human resource management, technology management, marketing and facility management as identified by Nettles et al. (2009). These responsibilities would relate to the academic preparation offered in Accreditation Council for Education in Nutrition and Dietetics (ACEND) accredited didactic programs in dietetics (AND, 2013b). The ACEND identifies specific competencies that dietetic students must demonstrate for areas including procurement, production, recipe and menu development, human resource management, food safety management, and financial management (ACEND, 2012)

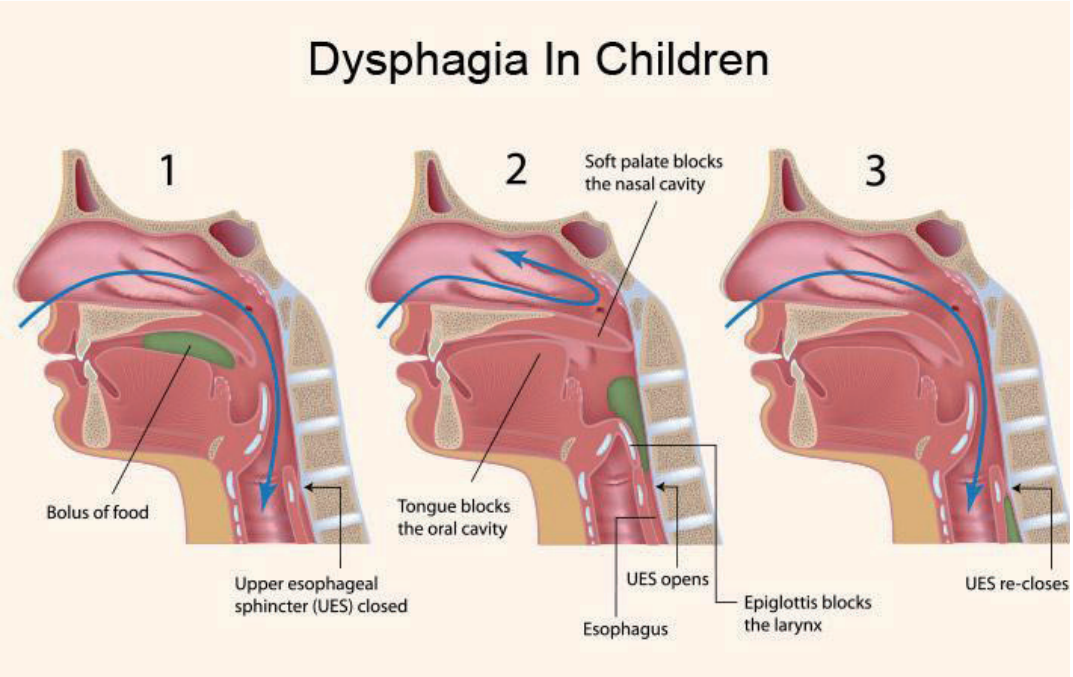
2.9 Role of Specialists in Working With Learners with Swallowing Problems

Think about how you eat. You first have to get the food or drink to your mouth. You may use a fork, spoon, straw, or your hands. You have to open your mouth and take the food in. You close your lips to keep the food in your mouth. You then chew the food or move the liquid to get ready to swallow.

Children have to learn this process. They start by sucking and learn how to eat solid foods and drink from a cup. Children will have some trouble at first. Drinks may spill from their mouths. They may push food back out or gag on new foods. This is normal and should go away. A child with a feeding disorder will keep having trouble. Some children will eat only certain foods, or they may take a long time to eat. These children may also have a feeding disorder.

Some children also have swallowing problems, or dysphagia. Swallowing happens in three stages, or phases. A child can have a problem in one or more of these phases. They include:

- **Oral phase** – sucking, chewing, and moving food or liquid into the throat. Feeding is a part of the oral phase.
- **Pharyngeal phase** – starting the swallow and squeezing food down the throat. The child needs to close off his airway to keep food or liquid out. Food going into the airway can cause coughing and choking.
- **Esophageal phase** – opening and closing the esophagus, or the tube that goes from the mouth to the stomach. The esophagus squeezes food down to the stomach. Food can get stuck in the esophagus. Or, a child may throw up a lot if there is a problem with the esophagus.



There are many possible causes for feeding and swallowing problems, including:

- nervous system disorders, like cerebral palsy or meningitis
- reflux or other stomach problems
- being premature or having a low birth weight
- heart disease
- cleft lip or palate
- breathing problems, like asthma or other diseases
- autism
- head and neck problems
- muscle weakness in the face and neck
- medicines that make her sleepy or not hungry
- sensory issues
- behavior problems

When it comes to treating children with feeding and swallowing disorders, there is just as much value in knowing what you don't know as there is in having a strong clinical skill set and knowledge base to address the disorder. In addition, speech-language pathologists (SLP) must also understand how the Individuals With Disabilities Education Act applies to these students.

IDEA considers a disorder "educationally relevant" if the disability interferes with the student's ability to participate in and access the educational curriculum with same-age peers. Students must be safe while eating in school, and they must maintain adequate nutrition to fully access the educational curriculum. Therefore, it is appropriate and necessary to treat dysphagia in the school setting.

SLPs typically are the most qualified professional to address dysphagia in schools. According to ASHA's 2014 Schools Survey, 13.9 percent of SLPs who responded provide dysphagia services in their school. Nonetheless, this low-incidence disorder has high impact, and even those SLPs who are competent in treating it may feel the need to sharpen their skills in this area. For others, dysphagia may not have been a major part of their preparation and training, so they need to further develop their knowledge and skills.

ASHA's 2002 "Knowledge and Skills Needed by Speech-Language Pathologists Providing Services to Individuals With Swallowing and/or Feeding Disorders" outlines nine areas of basic competency:

- Normal and abnormal anatomy and physiology related to swallowing function.
- Signs and symptoms of dysphagia.
- Proper procedures for analyzing and integrating clinical and instrumental information into a formal diagnosis of swallowing and feeding disorders with appropriate written documentation.
- Indications for, and procedures involved with, instrumental techniques used to assist in diagnosis and management.
- Basic management issues, including how to determine candidacy for intervention, as well as how to implement compensations and habilitative/rehabilitative therapy techniques.
- How to educate and counsel individuals with swallowing and/or feeding problems and their parents, care providers or other supporting persons.

- Importance of quality of life issues as they relate to the student and the student's family.
- Ability to identify and use appropriate functional outcome measures.
- Understanding of medical issues related to swallowing and feeding disorders

These broad basic competencies include specific knowledge in several areas:.

- **Diet modification**—Understanding the value and use of modified food and drink consistencies such as puree, mechanical soft, pudding-thick, nectar-thick, honey-thick and thin; and being able to educate others about diet modifications for safe swallow.
- **Accommodations**—Allowing the student extra time to complete snacks and meals to maximize swallow safety, nutrition and hydration.
- **Positioning for safe swallow**—Understanding the importance of body positioning for safe swallow. For example, if able, a child should be positioned with his or her head upright and stabilized, hips bent at 90 degrees in a sitting position with the feet stabilized. If the child is in a reclining wheelchair or bed, he or she should maintain an upright position for at least 30 minutes after meals to prevent reflux and subsequent aspiration.
- **Adaptive equipment**—Knowing about the use of adaptive equipment to facilitate safe swallow and self-feeding, such as adaptive cups, spoons and plates, and use of dycem to hold plates, cups and utensils in place.
- **Emergency preparedness**—Acquiring necessary emergency training when working with students who have feeding and swallowing disorders, including training in the use of the Heimlich maneuver and cardiopulmonary resuscitation in cases of airway obstruction.
- **Roles of dysphagia team members**—Understanding the role of each team member, including the physical therapist, occupational therapist, nurse, dietician, cafeteria staff, social worker, teacher, paraprofessional, physician and parent, and valuing what each team member brings.

- **IDEA**—Understanding the federal law and regulations, including the 13 disability categories, and knowing how feeding and swallowing disorders may affect educational performance.
- **Identifying the signs and symptoms**—Recognizing signs and symptoms of aspiration and aspiration pneumonia, including a wet or gurgly voice and cough, spiking a fever, wet lung sounds, generalized malaise and refusal to eat or drink.

The SLP may work as part of a feeding team. Other team members may include:

- an occupational therapist
- a physical therapist
- a physician or nurse
- a dietitian or nutritionist
- a developmental specialist
- a social worker
- a lactation consultant

2.10 Role of Audiologists in Special Services

An audiologist is a health-care professional specializing in identifying, diagnosing, treating and monitoring disorders of the auditory and vestibular system portions of the ear. Audiologists are trained to diagnose, manage and/or treat hearing or balance problems. They dispense hearing aids and recommend and map cochlear implants. They counsel families through a new diagnosis of hearing loss in infants, and help teach coping and compensation skills to late-deafened adults. Audiologists have training in anatomy and physiology, hearing aids, cochlear implants, electrophysiology, acoustics, psychophysics, neurology, counselling and sign language. They also help design and implement personal and industrial hearing safety programs, new born hearing screening programs, school hearing screening programs, and provide special fitting ear plugs and other hearing protection devices to help prevent hearing loss. In addition, many audiologists work as auditory scientists in a research capacity.

Audiologists play a key role on the interdisciplinary team to provide other professionals with information about children's hearing status, communication needs, device use, and intervention strategies. Conversely, audiologists gain valuable information and strategies from other team members. In a school setting an audiologist ideally, the educational audiologist should have primary responsibility for the identification of preschool and school age children with hearing loss and/or middle ear disease. The educational audiologist should coordinate the screening program. They help in setting up of classroom amplification system and also help in the seating arrangement for the children in a classroom. The audiologist identifies CAPD, monitors children with speech and language delay caused by hearing impairment. One responsibility of the educational audiologist is to ensure that the hearing impaired child makes maximum use of this residual hearing. By integrating diagnostic information from speech and language assessments, the educational audiologist can determine a child's current level of performance and the rate at which communicative skills are being acquired. The audiologist plays a most important role in audiologic management of the hearing impaired child. The responsibilities in audiologic management include selection and evaluation of amplification, amplification maintenance, monitoring classroom noise, provision of habilitative activities, and parent counseling. The educational audiologist must make sure that the characteristics of both the personal and classroom hearing aids of a child are comparable. The audiologist should provide the

teacher and principal with a list of suggestions for classroom noise reduction. Auditory training, speech and language training, or visual communication training and may be provided by the educational audiologist. The role of the educational audiologist is to coordinate these habilitative services and to interact with the child's teacher regarding specific areas in need of work or special concerns. The audiologist's input should be evident in the individual education program (IEP) as it relates to such audiologic information as specific amplification needs, the amount and type of language and speech interventions required, the acoustic environment, parent and child counseling, and support systems for the classroom teacher. Audiologists who are employed by or contract with schools have unique opportunity to influence good classroom acoustics in their district or service area. Major areas of responsibility for the audiologist include:

a) Advocacy
b) Information resource
c) Performing observations and acoustical measurements in classroom and other learning spaces
d) Collaborating with the educational facility planning teams
e) Ensuring access for the special population
f) Conducting efficacy measurements to determine the need for and benefits from acoustical treatments and modifications.

These areas of the activity are not necessarily the independent activities and may currently be within the work scope of some educational audiologists. For instance, advocacy and information resource functions are essentially pervasive across all areas of responsibility related to classroom acoustics. The audiologist can provide useful information to facility planning and management teams, but it is collaborate with other professionals , and the skill set of an acoustical consultant or engineer also may be required. Collaborating with the other professionals will be more productive than launching a solo personal campaign to influence the change. This is often the case when there is above the - ceiling plenum noise that needs to be managed using acoustic blankets or other available acoustical treatments. The audiologist can play a unique role in the promotion and marketing of good classroom acoustics. Audiologist, architect, engineer, acoustical consultant and other members of social facility planning teams each offer a specific knowledge and skill set that will contribute

to improving the classroom acoustics are perhaps the audiologist's greatest resource to be used to ensure acoustic access to information in the learning environment. The audiologist clearly not to provide long term support in resolving personal conflicts, which may manifest themselves as gilt or depression. Rather, counselling for the audiologist means helping client's fine ways to make practical adjustments in these situations to meet specific concerns. When science of gilt and depression are present, referral to a psychologist or other medical personal is appropriate. As non professional counsellors, one of our roles is to guide students through the acceptance stage of the grieving process, where we can promote an important component: a healthy self concept. The social emotional aspects of hearing loss are critical to consider for students in the schools with hearing loss. Just as we ensure optimal listening and learning for students with hearing loss. Audiologist working with children in educational settings need to be aware of evaluating all aspects of how a student functions and these components are inter related, not just the audiogram.

2.11 Role of Vision Specialists In Special Services

The population of students served by teachers of students with visual impairments and orientation and mobility specialists is incredibly diverse. Vision specialists enable students who are visually impaired to overcame barriers and create educational successes within the Common Core and Expanded Core Curriculum. The Expanded Core Curriculum is an additional set of disability-specific skills and a framework used in the planning, instruction, and assessment of student learning. Vision specialists work closely with parents and school professionals to adapt the educational environment and support their students.

Educators have developed numerous specialized teaching methods and curriculum materials in an effort to overcome the obstacles to learning presented by blindness and low vision. Recent advances in technology have greatly increased access to the general education curriculum and academic success for students with visual impairments. As one high school student who is blind remarked, "By taking advantage of technology around me, I am able to have an education equal to my sighted peers" (Leigh & Barclay, 2000, p. 129). However, the education of students with visual impairments is a field with a rich history of

more than 150 years, and today's developments were made possible by the contributions of many teachers and researchers who came before.

Because they must frequently teach skills and concepts that most children acquire through vision, teachers of students who are blind must plan and carry out activities that will help their students gain as much information as possible through the non-visual senses and by participation in active, practical experiences (Chen & Downing, 2006a, 2006b; Salisbury, 2008). For example, a child who is blind may hear a bird singing but get no concrete idea of the bird itself from the sound alone. A teacher interested in teaching such a student about birds might plan a series of activities that has the student touch birds of various species and manipulate related objects such as eggs, nests, and feathers. The student might assume the responsibility for feeding a pet bird at home or in the classroom. Through such experiences, the child with visual impairments can gradually obtain a more thorough and accurate knowledge of birds than she could if her education were limited to reading books about birds, memorizing vocabulary, or feeling plastic models.

A Teacher of Students with Visual Impairments (also called a Teacher of the Visually Impaired, a vision specialist, VI teacher, vision itinerant teacher, etc.) is typically a licensed special education teacher who has received certification and specialized training, in meeting

the educational needs of students who are blind or have visual impairments ages birth through 21 (states vary on the criteria for certification as a Teacher of Students with Visual Impairments). This is an instructional position, as opposed to a related service or vision therapy.

The role of the Teacher of Students with Visual Impairments (TVI) is to provide direct and/or consultative special education services specific to vision loss. The TVI provides support to students, teachers, and parents and acts as a liaison with community services. The TVI works with the educational team by advising the team about ways of enhancing the student's learning by adapting activities and materials to the student's abilities. Although the TVI is not an academic tutor, they may spend some time ensuring that the student understands concepts introduced in academic courses.

The TVI may help choose appropriate educational materials, and may brainstorm with teachers and therapists about effective adaptations. By working together, classroom teachers, therapists, and the TVI can create a classroom environment that encourages independence, academic success, and prepare the student to be the most productive member of society they can be. The following is a list of what to expect from the Teacher of Students with Visual Impairments.

- Interpret Medical Reports: As part of determining a student's eligibility and the impact of the visual impairment, the Teacher of Students with Visual Impairments will need to have the skills and training to read and interpret medical eye reports. The TVI will determine the implications thereof for educational and home environments.
- **Conduct Specialized Assessments and Make Recommendations:** The TVI will conduct Functional Vision Assessments to determine how much usable vision a student has to perform visual tasks. This assessment is initially conducted to determine the need for services from a teacher of students with visual impairments and to determine appropriate goals and level of support needed. This evaluation is updated at a minimum, every three years to determine ongoing eligibility and need for school based vision services. The TVI may also recommend appropriate

specialized evaluations as needed, particularly in low vision, orientation and mobility, and adaptive physical education. This evaluation is conducted even if the student has no usable vision.

- **Actively Participate in the Individualized Education Program (IEP):** The TVI will need to communicate with the team members on how the student's performance may affect their school performance by providing information on the student's learning style, utilization of visual information, and other strengths unique to individual students who are visually impaired. The TVI will identify any goals and objectives in specialized areas related to the visual needs of the student. The TVI will also identify instructional methods and materials for meeting goals and objectives. Finally, the TVI will recommend appropriate service delivery options, including class placement, physical education, related services, specialized equipment, adaptations in testing procedures, and time frames for implementation. Consideration will be taken as to the current and future reading and writing media for the student with a visual impairment based on reading distance, reading rates and accuracy, portability of reading skills, visual fatigue, and tactual sensitivity.
- **Recommend Educational & Instructional Strategies:** The TVI will assist in determining and procuring classroom equipment and materials necessary for the student with visual impairments to learn (brailler, low vision devices, assistive technology, computer) including ensuring necessary room modifications and lighting changes. The TVI will provide the classroom teacher with information regarding the specialized strategies needed to teach a student who is blind or visually impaired. The TVI will also assist in obtaining specialized materials, including procuring materials from the American Printing House for the Blind (APH), providing braille, recorded/enlarged materials, and other needed materials.
- **Ongoing Observations:** The TVI conducts ongoing observations of the student in a variety of familiar situations performing routine tasks or activities to assess how the student is using their vision. In doing this, the TVI can find out what motivates the student to look. The TVI will then use objects and activities similar to those that have been motivating in the past. It is also beneficial to get an understanding of how the student spends their time. What does the student do? How does the student play and with what? Where do they go? Who do they play or interact

with? This is a process to identify the student's existing (and desired) activity setting. These observations will assist the TVI in ensuring the goals and accommodations as well as level of service continue to be appropriate.

- **Use of Natural Environments to Address Goals:** Teaching techniques to enhance vision should not be taught in isolation. It is important to look at what the needs and activities of the student are in school and in their everyday life that are affected by their visual performance, and teach to those tasks. If the family/teachers are interested in obtaining other objects for the student to play with, then the TVI can assist the family and/or teacher in obtaining such items.

  The responsibility of the TVI is to support the student with what he/she has everyday access to, where he/she is, and sharing information that matches the student's/families/classroom priorities (watching television, playing on the computer, playing with toys or games). These activities provide multiple learning opportunities. It is easy to take in a bag of toys, but more challenging and appropriate to explore existing toys that the student will have daily access to, for continued exposure/practice. Learning takes place at all times, so it is best to use what is available/accessible to give the student more practice in using existing skills and developing new abilities. "Toy bag treatment sessions" typically do not promote functional skill use and learning in natural settings.

  Some skills are best addressed outside of the regular classroom to avoid visual and auditory distractions. The goal should be to learn the skills and then begin to transfer those skills during classroom activities.

- **Communication with Caregivers and Classroom Teachers:** The TVI will want to have ongoing communication with the caregivers and classroom teachers in order to try to develop a better understanding of the student. An itinerant teacher will not have the same rapport with the student as they do not spend as much time with them. For that reason, it is helpful to talk with parents and classroom teachers who do have this rapport about how they feel the student is doing, if they are addressing the goals and how the student is functioning. The TVI may ask to observe the

teacher working with the student to observe how the student is functioning within the normal routine and with familiar adults.

- **Direct Instruction in the Expanded Core Curriculum:** The TVI will determine which areas of the Expanded Core Curriculum (ECC), a unique curriculum that addresses needs a student who is blind or visually impaired may have that are not addressed within the standard curriculum. Although not all students will have needs in all areas of the ECC, the areas of the ECC include: Compensatory, Functional and Communication Skills; Sensory Efficiency; Orientation & Mobility; Social; Independent Living; Recreation & Leisure; Use of Technology; Career & vocational; and Self Determination.

Furthermore, Orientation and mobility (O&M) is an important and integral part of the curriculum in the comprehensive delivery of services to children with visual impairments in the public school settings. The O&M teacher serves as a member of the multidisciplinary team in developing and implementing individualized education programs for children with visual impairments. This concept was reinforced with the enactment of Public Law 94-142, the Education for All Handicapped Children Act of 1975.

Orientation is the process of using sensory information to establish and maintain one's position in the environment; mobility is the process of moving safely, efficiently, and gracefully within one's environment. The ultimate goal of O&M instruction is for visually impaired persons to be able to travel in any environment as independently as possible. To reach this goal, O&M instruction must begin at the earliest possible age.

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The O&M teacher is responsible for developing and conducting an orientation and mobility assessment for all children with visual impairments in order to determine the nature and extent of services needed. An initial assessment is conducted to determine each child's present level of functioning. The O&M teacher takes the lead role in assessing formal orientation and mobility skills and serves in a cooperative role with the teacher of students with visual impairments in assessing the areas of concept, motor, and sensory skills development. Other professionals such as the regular class teacher, physical education teacher, occupational therapist, or physical therapist should be

consulted and involved in the assessment process when appropriate. Short- and long-term goals are developed (with input from the parents and other members of the multidisciplinary team), and reasonable time limits are specified for completing the goals.

The role of the O&M teacher is to teach formal orientation and mobility skills to those children with visual impairments for whom they are appropriate. Formal mobility skills include such areas as

I. skills in movement with a sighted guide,
II. protective techniques,
III. indoor cane skills,
IV. outdoor cane skills,
V. street crossings, and
VI. use of public transportation systems.

Formal orientation instruction is highly dependent upon maximum development and use of the senses. It entails such skill areas as the following:

a) ability to identify and make use of landmarks and clues;
b) knowledge and use of compass directions;
c) knowledge and use of indoor and city numbering systems;
d) ability to align the body to objects and with sounds for the purpose of establishing and/or maintaining a straight line of travel;
e) use of systematic search patterns to explore novel objects and environments (self-familiarization);
f) recovery skills; and
g) knowledge and use of where, when, and how to solicit aid.

The O&M teacher provides direct instruction in concept development, environmental and community awareness, and motor development. The O&M instructor should also serve as a team member and consultant to the teacher of students with visual impairments, the regular class teacher, other school personnel, and parents in the instruction and reinforcement of concept development, sensory skill development, and motor development. The development of good gross and fine motor abilities, spatial and

environmental concepts, and maximum use of the senses are important prerequisites for formal orientation and mobility instruction.

Often because of time and liability concerns, it is common practice for the O&M teacher to be responsible for advanced orientation and mobility skills training, such as cane instruction and street crossings. It is also the responsibility of the O&M teacher to provide students with visual impairments and their parents information about alternative systems (other than the cane) of independent travel such as dog guides and electronic travel aids (ETAs).

The O&M teacher is responsible for designing and implementing ongoing inservice education activities in the areas of orientation and mobility for teachers, other professionals, paraprofessionals, and administrators. Inservice activities should serve to educate other school personnel about the role of the O&M teacher and the goals of the O&M program. Orientation and mobility inservice activities should also focus on the roles of all appropriate school personnel in the development and reinforcement of concept development, sensory skills training, motor development, and elementary formal orientation and mobility skills. To be maximally effective, O&M training should be integrated as much as possible into school curricula and activities.

Orientation and mobility instruction will have very little impact on children with visual impairments if parents and family members are not involved in the process. In addition to working cooperatively with family members in developing realistic goals, the O&M teacher must develop specific activities that parents and family members can implement in the home setting in order for continuity of instruction to occur. Orientation and mobility activities should be designed so that parents and other family members can carry them out in the context of their daily routine through daily living activities, recreational activities, and so forth. The O&M teacher must keep parents informed of their child's progress and to instruct them in how to integrate and reinforce orientation and mobility skills in their day-by-day routines. Parents should be encouraged to be actively involved in their child's program and encouraged to observe O&M lessons whenever possible.

Because a great deal of O&M instruction takes place in the community, it is the one aspect of the total curriculum that is most visible to the general public. Frequently, the O&M teacher has the opportunity to educate the general public regarding the capabilities of visually impaired persons. Establishing community relationships through O&M instruction may dispel the many misconceptions that the general public often has about blindness and people with visual impairments.

School districts should employ qualified O&M teachers; they should not use teachers of students with visual impairments or other school personnel in lieu of a qualified O&M teacher in the delivery of orientation and mobility services. Although the O&M profession has experienced rapid growth in children with visual impairments in public school settings, there is still a great need for these services throughout the country in all settings and geographical areas.

Unit- end activities

- **Objectives questions**

Group A

Tick the best answer.

9. The initial focus of school nursing was the _____of communicable disease and reduction of absenteeism via the promotion of hand hygiene and the appropriate assessment and exclusion of students from school.

a) Control
b) Eradication
c) Implementation
d) Study

2. for children with_____, art therapy in a school setting can offer opportunities to work through obstacles that impede educational success

a) common needs
b) general needs
c) diverse needs

d) **Special needs**

3. The _____ of an Art Therapist is to help students express and contain their internal conflicts, while facilitating their ability to implement change.
   a) irresponsibility
   b) **responsibility**
   c) nature
   d) doctrine
4. A speech pathologist is a trained medical professional who can help children with a number of _____ disorders such as trouble swallowing, motor skills, speech issues, cognitive-linguistic conditions and language. Always
   a) **oral**
   b) auditory
   c) vision
   d) sensory
5. Music therapy enhances special education goals and objectives while offering an _____to traditional teaching methods
   a) Backup
   b) **Alternative**
   c) Information
   d) Support
6. Federal law _____ that physical education be provided to students with disabilities.
   a) **Mandates**
   b) Bans
   c) Prohibits
   d) Argues
7. An _____ is a physician who specializes in diseases of the ear, nose, and throat.
   a) **otorhinolaryngologist**
   b) Dentist
   c) cardiologist

d) gynecologist

8. A school _____practitioner is defined as an individual possessing a food and nutrition degree working in a school nutrition program; specific job titles include director, manager, supervisor and nutrition education specialist Negative

a) health

b) teacher

c) nutrition

d) children

Group B

- Subjective questions

Short answer questions

V. What is dysphasia? Discuss briefly

VI. How do orientation and mobility specialists help students with visual impairments?

VII. What is the role of teachers for students with visual impariments?

VIII. How do vision specialists assist children with special needs?

Group C

- **Long answer questions**

iv. Discuss how the roles of school nurses have changed over the years

v. Why are nutritionists and dieticians especially important for children with special needs?

vi. What is music therapy and what is it's significance?

UNIT 3

Role of Special Educators in Interdisciplinary Connections

3.1 Introduction

Since 1975, there have been two major developments for students with mild moderate disabilities in special education programs in U.S. schools. First, the number of students served steadily increased from approximately 3.7 million to over 6 million, reflecting an extraordinary achievement in terms of access (National Center for Education Statistics. 2011: U.S. Department of Education, 1995, 2005). Second, the placement patterns for these students served under the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 reflected high enrollment in general education classes. For example, the national average for the percentage of students aged 6—21 who spent at least 80% of their time in general education classrooms grew from 31.6% in l989 to 51.9% in 2004 (U.S. Department of Education, 2005) some states (i.e.. Vermont, North Dakota, Oregon and Colorado) significantly exceeded this national average by supporting more than 70% of their students with disabilities in general education settings (U.S. Department of Education, Office of Special Education Programs, 2005), and more than 90% of students aged 6—21 were educated in regular classrooms for at least some portion of the school day (National Center for Education Statistics. 2011).

In addition to advancing the inclusion of students with disabilities in general education classrooms, the academic performance of Students with high—incidence disabilities has been increasingly calculated. Federal laws have mandated that students with disabilities participate on state tests and that stales report these test results to the public (IDEA. 1997). Unfortunately, IDEA imposed no consequences on states that did not comply with these mandates and many were slow to meet the law's mandates. It was not until the passage of the No Child Left Behind (NCLB) Act (2001) that states enacted significant, large—scale changes to their testing and accountability systems to increase participation of students with disabilities in the core curriculum and ensure that the progress of these students was

monitored and reported. The 2004 reauthorization of IDEA expanded testing requirements at the slate level for students with high— incidence disabilities, as local school districts were required to develop and implement alternate assessments aligned with the state's academic content standards. In addition, states reported (a) the number and performance of students with disabilities taking regular state assessments and how many of them received accommodations to participate in those assessments, (b) how many students with disabilities participated in alternate assessments aligned with the state standards, and *(c)* the number of students with disabilities taking alternate assessments aligned with alternate achievement standards. Finally, the performance of students with high-incidence disabilities must be compared with the achievement of all children, including children without disabilities, on those assessments.

It is important to note that placement in inclusive classroom settings and accesses to the general education curriculum are important issues for all students with disabilities (Skiba, Michael, Nardo, & Peterson, 2002; Skiba, Peterson, & Williams; 1997). The 2004 reauthorization of IDEA stipulated that states allow districts to use multitier systems of support (MTSS) strategies such as response-to-intervention (RTI) and positive behavior support (PBS) for determining if a child has a specific learning disability or behavioral disability.

Based on the aforementioned points, it has become clear that special educators play divergent roles in interdisciplinary connections in education. It is clear that special educators by law have to work with students, parents, family members, other professionals as needed, and community agencies. Outside the law, special educators will be unsuccessful in their jobs if they fail to collaborate, consult, and cooperate with internal and external stake-holders of their job.

3.2 Working with Students

To meet the varied and diverse educational needs of students with disabilities in inclusive classrooms, the reauthorization of IDEA (2004) required states to allow districts to use MTSS strategies such as RtI and PBS for determining if a child has a specific learning disability or behavioral disability. RtI involves early identification of students' learning problems and the use of increasingly intensive lessons, or interventions, to address those problems before they become entrenched (Samuels, 2011). The RtI three-tiered conceptual

model is designed to shift the locus of educators from finding a disability or within—child deficits to focusing on providing the best instruction for all students in the general education classroom. The RtI model emphasizes early intervention, with a focus on making sure children receive appropriate instruction at the 'first tier" or general education classroom level, and the push to match instruction to a student's needs based on ongoing classroom assessment (Utley, Obiakor, & Bakken, 2011: Vaughn, & Fuchs, 2003; Vaughn, Linan-Thompson. & Hickman, 2003: Vaughn, Mathes, Linan-Thompson, & Francis, 2005: Vellutino, Scanlon, Small & Fanuele, 2003). PBS has specific characteristics associated with it and these include (a) the development of positive behavioral expectations. (b) specific methods to teach these expectations to staff and students, (C) proactive supervision or monitoring of behavior, (d) contingency management systems to reinforce and correct behavior, and (e) methods to measure outcomes and to evaluate progress across three tiers with specific core elements at different levels. These levels are:

1) Primary prevention school-wide level, including universal school-wide management strategies to reduce disruptive behavior and teach pro-social skills to all students;
2) Secondary prevention level, including targeted or group-based intervention strategies for students at-risk of developing more serious antisocial behaviors (about 5 - 10%); and
3) Tertiary prevention level, including functionally derived treatment strategies for the small number of students (about 1—3%) who engage in more chronic patterns of antisocial behavior (Homer, Crone, & Stiller, 2001: Horner, Sugai, Todd, & Lewis-Palmer, 2005).

The previously described evidence-based approaches to instruction and behavior support have served to pave the way for marching toward successful inclusion of students with disabilities in general education classrooms. No longer are students with high incidence disabilities separated from mainstreamed students (Praisner, 2003); instead, efforts arc made to provide effective education for students with disabilities in inclusive general education classrooms. The professional literature has now focused on the preparedness of educators and administrators to develop and implement effective inclusive programs and support within their general education classrooms (Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012).

3.3 Inclusion of Students with Disabilities

In order for the inclusion to be effective, there must be collaboration between general and special education teachers. However, these *two* teacher groups have not always been effective in teaming together. Research has shown that teacher expectations influence student behavior, self-esteem, and achievement; therefore, If a teacher has a negative attitude toward students with disabilities, then those students most likely will not be successful in the teacher's classroom (Obiakor. 1999). Research has also shown that administrator's attitudes toward students with disabilities are important for successful inclusion, since they are most influential in developing and operating educational programs in their schools. Research also has shown that many school districts implement inclusion without adequate professional development or preparation for using interventions beforehand (Ohiakor et al., 2012).

Successful models for effective inclusive schools and classrooms need to be analyzed and described in ways that are useful by practitioners in their classrooms. Researchers of peer-reviewed literature often write of the positive impact of inclusive education, focusing on the social skills learned by students, the sharpening of pedagogical skills by teachers. and the role of inclusive education in the promotion of Civil Rights (Broderick. Mehta Parekh, & Reid, 2005; Polat, 2010; Soodak, 2003). Most importantly, research has shown how students with disabilities benefit academically from inclusive education. This practitioner literature has also focused on the necessity of' teachers receiving preparation in inclusive education as part of their teacher education programs (Florian & Linklater, 2010; Jordan, Schwartz, & MeGhie-Richmond, 2009). Scholarly articles have made suggestions on implementing inclusive education, but descriptions of such approaches are typically minimally discussed and do not provide sufficient direction for teachers and other school professionals.

Several studies have provided information that is useful for practitioners in understanding the complex range of issues they must address in schools as they develop and implement inclusive practices. For example, Daane, Beirne-Smith, and Latham (2000) examined administrators' and teachers' perceptions of the collaborative efforts of inclusion in the elementary grades by conducting a survey of 324 elementary general education teachers. 42 special education teachers, and 15 building administrators. The results showed that teachers and administrators agreed that while collaboration is essential to support inclusive education, it was often not a comfortable experience for many professionals due to (a)

conflict of personalities. (b) lack of planning time, and (C) limited time in the classroom by the special education teacher.

Survey responses further revealed that both general and special education teachers believed that the inclusive classroom was not the most effective environment for students with disabilities, although administrators believed that it was. Respondents also felt that general education teachers were hot prepared to teach students with disabilities, and these teachers lacked the confidence and support needed in addressing the needs of these students (Daane et al., 2000). This investigation provides critical information for practitioners that must be addressed as they work to develop and implement effective inclusive programs.

In another investigation that provided a rich description of inclusive education, Idol (2006) described how special education services were provided in four elementary schools and four secondary schools in a large metropolitan school district. The schools were purposefully selected as settings with well-developed special education programs in which the stall believed they provided strong and supportive programs for educating students with disabilities. The schools were also selected so that one half was from the top and the other from the bottom of a continuum from no inclusion to full inclusion. Idol thus provides a description of a range of perspectives on providing high-quality educational services for students with disabilities in a cross-section of schools that are similar to those in many local education agencies. The results of this investigation revealed that only one of the elementary schools had placed an emphasis on special education and inclusion in their school improvement plan, and included students with disabilities within the general education classroom for all of the school day.

Many students with disabilities in the other three elementary schools were educated for some or most of the school day in separate special education classrooms. Administrators in these schools were asked how students with disabilities were best educated. Three of the building administrators were in favor of inclusion only if an instructional assistant or a special educator were provided to support the general education teacher. Teachers and instructional assistants in all four elementary schools stated that they were applying the skills necessary for effective inclusion, which included (a) adaptation of instruction, (b) modification of curriculum, and (c) classroom management and student discipline.

Many teachers in the four elementary schools had additional comments that were generally positive about students with disabilities and inclusion. For example, these teachers

indicated that they liked having instructional assistants and valued special education teachers in their classrooms, felt that statewide test scores are not affected by inclusive programs, did not like pull out programs, liked inclusive programs, and felt that mainstreaming he used rather than inclusion for students with more serious emotional problems. These teachers also stated that there was a need for more professional development related to inclusion, more opportunities were needed to visit schools with successful inclusive programs, better training for instructional assistants was needed, and more use of mainstreaming rather than inclusion for students with serious emotional problems should occur. Finally, elementary teachers addressed the need to respect be special challenges inclusion) presented to the classroom teacher and providing support (Idol, 2006. p. 5) to these teachers.

For secondary settings, in the schools that were more inclusive (one middle school and one high school), referral rates to special education were much lower than at the other two schools. Possible reasons for this were providing more support by special educators and other support personnel for students with disabilities in the general education classrooms; providing support programs for tutoring, counseling, and career development: and the use of consulting teachers to support instruction. In addition, support services in these schools were typically provided for all students who needed assistance, and not just students with disabilities. In contrast, the schools that were less inclusive had higher referral rates. Possible reasons for this included provision of more separate class and resource programs for students with disabilities, providing fewer classes with support in the general education classroom, and providing classroom resources only for students with disabilities.

All secondary administrators reported that they were supportive of inclusion, but only if support services were provided in the general education classroom. Interestingly, while four administrators reported that they were good collaborators and worked well with teachers, the administrator in the most inclusive secondary school said that he was a good collaborator who worked well with most teachers but not all of them. Secondary teachers perceived that they were skilled at adapting instruction and modifying the curriculum for student needs, addressing student discipline and classroom management issues, and collaborating with other professionals. In three of the secondary *schools,* the majority of teachers favored educating students with disabilities in general education classes with assistance horn a special educator. However, in one high school, equal proportions of

teachers supported inclusion and part-time special education classroom support. Across all schools, a majority of teachers felt that support provided in the general education classrooms should be for all students, and not just those with disabilities.

Most secondary educators felt that students with disabilities did not adversely affect the education of typical students. Additional comments from these educators indicated that they made distinctions between including students with academic versus behavioral problems and Mt that they could better manage and support students with academic problems. Many of the teachers also noted that more personnel were needed to provide adequate support in general education classrooms for students with disabilities. Finally, many of these teachers indicated the need for additional professional development related to inclusion.

Idol (2006) noted that this investigation provided strong support for including students with special education challenges in general education programs (p. 94). However, she also provided several recommendations from educators in these settings to support inclusive practices, including more professional development for teachers in areas that support effective classroom practice, visits to successful inclusive schools, use of heterogeneous learning groups, and more professional development of instructional assistants. Finally, teachers across the schools made recommendations for policy and practice, including:

- Reconsider the viability of self-contained classes for students with disabilities;
- Consider mainstreaming rather than inclusion for some students with emotional/behavior disorders;
- Consider redistributing all students with disabilities to their neighborhood schools for more equitable distribution *of* students with different types of disabilities;
- Provide open and clear communication regarding why some students are provided more assistance in the general education classroom, including those who are provided instructional or curricular modifications;
- Ensure that the entire school staff is well prepared related to the use of consulting teachers. instructional assistants, and cooperative teaching;
- Make sure that special education teachers work with the principal and other professionals to determine how to best use their professional time working with students.

The studies by Daane et al. (2000) and Idol (2006) provide rich, descriptive information that is useful for practitioners as they develop and implement effective inclusive

programs in their schools and classrooms. These investigations serve to provide practitioners with a realistic picture of what should he expected as they work in inclusive settings, and some of the complexity that is associated with these activities. More investigations are needed that provide this type of information that is usable by teachers and principals as they work to provide more effective inclusive schools and classrooms for all students with disabilities. Ecological models, which address educational phenomena, assert that students are involved in multiple environments where they play different roles. In each environment, they are expected to show certain behaviors: sometimes this can create conflicts, perhaps due to a discrepancy between the individual's skills in meeting the requirements of that environment or because the environment does not meet the individual's needs. As a result, comprehensive service provision includes meeting the educational social emotional needs of students with disabilities in home and community environments.

3.4 Working with Families

Research supports that teachers themselves are influenced by parental involvement. A teacher plays a major role in the grades and ratings a student receives in class, and a high degree of parental involvement likely influences how the teacher perceives and even grades the child (Jeynes, 2005). Research has shown that parental involvement has a significant influence on student achievement (Barnard, 2004; Fan & Chen, 2001). Beehers (1986) literature review on parental involvement found that there was "substantial evidence" which shows that students whose parents are involved in their schooling have increased academic performance and overall cognitive development. Data from the National Assessment of Educational Progress (NAEP) have found that parental levels of education and parental involvement in *schools* have a significant influence on student performance. The NAEP data report a 30-scale point differential on standardized achievement tests between students with involved parents compared to those students whose parents were not involved (Dietel, 2006).

Researchers have also found that parental involvement is associated with a greater likelihood of aspiring to attend college and actually enrolling (Cabrera & Steven, 2000; Horn, 1998), as well as with higher grades (Lee, l 993; Muller & Kerbow, 1993), higher eighth grade mathematics and reading achievement (Lee, 1993; Sui-Chu & Willms, 1996), lower

rates of behavioral problems (Lee, 1993), and a lower likelihood of high school dropout and truancy (McNeal, 1999). Sanders and Harvey (2002) conducted a case study of school—community partnerships and found that when schools were willing to structure authentic two—way communication with parents, levels of parental involvement increased considerably.

Using Bourdieus cultural capital framework, Lareau and Horvat's (1999) study explores how some low-income black parents had great difficulty in communicating with their child's teachers as a result of the distrust they had of the educational system stemming from the historical legacy of racism. School teachers expecting parents to be positive, supportive, and trustful of their judgments were disappointed when black parents criticized and expressed anger at them for the differential treatment of black students. The criticism of teachers by black parents turned into negative cultural capital when their class-specific behaviors clashed with the expected norms of conformity and being positive of the middle—class white teachers, leading to the social exclusion of low-income black parents. Despite the worries that some middle-class black parents had concerning the possible differential treatment of their children, they were able to more effectively activate their cultural capital by closely monitoring their child's progress without letting school officials know of their distrust for the system. The attempts by a low—income black family to activate cultural capital for their daughter were rebuffed by school officials as a result of an informal implicit standard of what parental involvement should he like that delegitimized the concerns of those who did not conform to it (i.e. low-income black parents experiencing social exclusion).

Fine (1993) examined three major urban parent involvement projects in Baltimore, Philadelphia and Chicago. All were undergoing *specific* efforts aimed at involving parents and giving them a greater voice. In Baltimore, the "With and for Parents" program sought to collaborate with its middle school and empower parents individually: however, it eventually ended up becoming a crisis intervention program, resulting from a failure to redistribute power and resources at the family—school level. Philadelphia pursued shared decision making and school-based management, which placed parents on decision-making bodies with educators and administrators. Fine notes that in those structures, teachers and parents were placed in adversarial positions as a result of larger bureaucratic action, noting specifically that both of their interests would be better served in a democratic coalition against those structures. In the late 1980s, Chicago passed legislation calling for their

schools to be governed by local school councils comprising mainly of parents, along with community representatives, teachers, and principals. However, as a result of a fiscal crisis, some of the power that parents were to have in these positions was undermined as restrictive decisions that had to be made to accommodate the monetary shortfall, as well as low-income parents being taken less seriously as a result of their limited cultural capital. Fine argues that real parent involvement will result when parents become organized as political bodies working to transform public life, rather than to just help particular families in a crisis intervention mode.

Henderson and Mapp (2002) conducted an examination and synthesis of 51 recently conducted (all but two are from 1995 to 2002) studies on family involvement and student achievement. The three overarching themes in the studies center around the impact of family on student achievement; effective strategies for connecting schools, families, and community; and the development of community organizing as a tool for mobilizing parents as a means of holding schools accountable. This study reinforces the positive and convincing relationship between family involvement and benefits for students, including improved academic achievement" (p. 24). More importantly, new literature concerning the effects of' parent and community organizing in urban areas was explored, demonstrating the impact that comes from establishing a power base (leading to changes in policy, resources, school culture, etc.) in an effort to hold schools accountable. Henderson and Mapp provide a set of recommendations aimed at educators, parents, and community members, as well as researchers ranging from the acknowledgement that all parents are involved in some form in the education of their children, to conducting research that is more rigorous and focused using "more culturally sensitive and empowering definitions of parent involvement" (p. 69). In light of this research, legislation has been passed to create more meaningful ways for parents to play a concerted, more active role in their children's education (Henderson, 1987). Parents and teachers need specific information to maximize the efficacy of parental involvement (Jeynes, 2005). The next section discusses the role of special educators in interdisciplinary connections in collaborating with families with disabilities to foster greater parental involvement. Parents have the power to intimidate teachers and some do. Teachers have varied talents in their personal interaction skills. Some interact better with students than with parents. Some teachers feel poorly prepared to establish relationships with parents whose lives are very different from their own.

Park, Alber-Morgan, and Fleming (2011) remarked about additional roadblocks to actively involving parents. Though particular interventions such as functional behavioral assessment and positive behavior supports have been successful for decreasing negative behaviors (Heward, 2009), *it* is critical to Lake into account the individual family when selecting strategies for home and school implementation. Particular factors such as culture, family structure, work schedules, and socioeconomic status may impact the success or failure of various programs (Moes & Frea, 2000). Accounting for individual family difference is an important consideration for the success of intervention programs.

3.5 Collaborative Team-Centered Relationship between School Personnel and Family Members

Turnbull et al. (2007) noted the importance of school personnel articulating not only how teachers and families should interact but also focusing on what specific services arc essential. It is difficult for families to make informed decisions about their choices if they do not have a comprehensive awareness of the array of services available. In line with the previous discussion on working with the family instead of only the child with a disability, many researchers highlight the notion of family support's that encompasses a wide range of components (Lucyshyn, Dunlap, & Albin, 2002: Park et al. 2011: Turnbull. Turnbull, Erwin, Soodak. & Shogren, 2010). Simpson, Peterson, and Smith (2011) propose a comprehensive framework of support components. Table 1 lists the components of the comprehensive framework of support.

Table 1: Comprehensive Framework of Support Components

a) **Qualified and committed professionals**	Well-trained teachers and support personnel understand the challenges faced by families of children with emotional disabilities. These personnel are vital in providing jargon-free information about the recommended interventions for the child. Unfortunately, regular classroom teachers feel ill equipped to handle the multiple challenges of the multiple needs of the child and the family.
b) **Proven academic support systems**	Academic and curricular Issues often are placed on a backburner for children with emotional disabilities;

	however, it is important to engage the child in meaningful learning *experiences* at school and at home.
c) **Environmental supports**	Children with emotional disabilities tend to be more successful when their school and home environments include clear rules. Consistent routines and organized physical space.
d) Social skill and social interaction support	Opportunities for social interaction in a variety of settings provide useful practice for children. Providing families with information on and resources for developing the child's social interaction skills is beneficial for the harmony of the classroom environment as well as the home environment.
e) Coordinated community support	Due to the stress placed on the family, awareness of and enrollment in a network of services provides much needed assistance to families. Parents and families of children with disabilities often have complex needs, typically considered beyond the purview of schools, such as health, legal, housing, recreation, employment and financial.

Families have complex needs and rarely in the categorical system of service provision is attention paid to the overall plan of assistance. When a vehicle for arranging this interagency collaboration and coordination of services does not formally exist in a community, schools may be the focal point for developing this (Cohen, Linker, & Stutts, 2006). Schools may help by establishing a framework for such services to exist.

Van Hove et al. (2009) discuss the relationship between the extent to which families can participate in the educational process of their child and the specific characteristics of the families' capabilities and problems. Families can participate more or less depending on such variables as their interests, the severity of the child's problems, the impact of the child's problems on the family members, work availability and hours, and availability of respite care (Dyson, 2010). If services are to be provided that meet the expressed needs of the family in a team format, the burden of training rests on all members of the team — the school, the family, and the service agencies.

Probably the best method of reporting pupil progress is through properly structured parent—teacher conferences. Such meetings allow for exchanging information about the student and clearing up misconceptions about the student's program. Parents may ask questions about areas that might otherwise be unclear or misunderstood. The key to conducting meaningful conferences is planning. The following are some general considerations to bear in mind when setting up conferences:

- Allow enough time to adequately discuss each student.
- Be aware that some parents may have conflicts with the allotted times; they should be allowed to make appointments at other times.
- Develop some structure or format for keeping the conference on-task and flowing.
- Communicate in clear, understandable language, avoiding educational jargon.
- Make the setting comfortable, but businesslike.
- Allow for questions during the course of the conference, not only at the end.
- Make provisions for parents who may have to bring young children.
- Make provisions for parents who arrive early and have to wait for their appointment.
- Be on time.
- Have folders available containing representative samples of the student's schoolwork (parents who arrive early may examine these while waiting).
- Be flexible, but make every attempt to follow the schedule.
- If problem areas are identified, inform parents how they may help in resolving the problems.

The National Peer Technical Assistance Children's Mental Health (1997) evaluated parent—teacher collaboration in their report *Family- Professional Partnerships: Moving Forward Together.* The report articulates five "Continuum of Service" configurations of collaborative team supports. These include:

a) Professional-Centered: In the Professional-Centered approach, the relationship between the family and the teachers is adversarial and at times hostile. The parent is viewed (consciously or unconsciously) as part of the child's problem. The professional has the answers and the parent needs to listen to the expert advice.

b) Family-Focused: The school professionals arc still the experts, and the family is seen as a "helper" who is to follow the directions provided by the experts.

c) Family-Allied: The school professionals and the family members have something to offer in this view. There is more sharing of information and less telling of what to do.

d) Family-Centered: the family is seen as the "customer," and the job of the professional is to support the parent as the primary agent in helping the child. The school personnel believe the parents are responsible for and capable of determining what is best for their child.

e) Team-Centered: Decisions about supports are made in what is referred to as a "wraparound model (1997, p. 34). Family members and school personnel investigate assets, resources, and various interventions and match those with the child as part of a collective agreement.

In summary, communication involves sending, receiving, and perceiving information. This is reasonably straightforward and seemingly simple; however, effective communication is complex. In order for it to occur, there must be careful structuring by the facilitator who, in this case, is the teacher. Effective communication can lead to mutually beneficial collaborative team-centered relationships between school personnel and family members, thus resulting in potential growth for the child.

3.6 Working with Other Educational Professionals

Multidisciplinary teams (MDTs) were originally conceptualized and mandated by P.L. 94-142 as a procedural safeguard for identification and placement of students in special education (Pryzwansky & Rzepski, 1983). The function of these teams was to assist general educators in their efforts to support students in the least restrictive settings. The team decision-making requirement was based on the premise that group decision making was superior to individual decision making (Abelson & Woodman, 1983).

Since the early 1980s, the role of teams in schools has expanded. Today MDTs may also function as a problem-solving unit to assist teachers in maintaining students in general classrooms (Pryzwansky & Rzepski. 1983: Truscolt, Cohen, Sams, Sanborn, & Frank, *2005).* Specifically, school team roles have taken two general forms: teacher assistance teams (TATs) and pre-assessment teams. The TAT model engages within-building personnel in collaborative and problem-solving processes. TATs are intended to provide problem-solving assistance to general education teachers in regard to students who are at risk for referral to special education. The TAT can be used to clarify classroom problems, collect and review

student assessment data, develop interventions, set instructional or management goals, modify curriculum, generate strategies for whole classes, and/or prepare for parent conferences (Chalfant & Van Dusen Pysh, 1989). Since TATs were established, investigations of team effectiveness have reported success in intervening in classroom difficulties (Gilmer, 1985; Talley, 1988). High levels of teacher and team satisfaction with the process have been reported (Chalfant & Van Dusen Pysh, 1989).

TATs and MDTs often provide assistance and problem solving through development and implementation of strategies, adaptations, and interventions to be used to support struggling students. A teacher may seek the assistance of one of these learns to effectively meet the needs of a student. As a teacher begins work with the TAT or MDT, the professional group tends to look to categories of interventions that may provide the supports students and teachers require for success. While those interventions vary across teachers, students, and settings, most initial interventions fall within one of three categories: (a) curricular, (b) environmental, and/or (c) management. Table 2 provides examples of curricular, environmental, and management adaptations that may be suggested in informal collaborative situations.

Table 2: Chart of Curricular, Environmental, and Management Adaptations Examples

Curricular Modifications	Environmental Modifications	Management Modifications
Tape lessons or instructions	Change the student's seat assignment	Establish home-school communication systems
Simplify vocabulary of test items, practice sheets	Assign preferential seating	Post rules and consequences for behavior
Provide tests in segments	Post class routine	Put student on daily or weekly progress report
Provide visual or memory aids such as number lines, formulas, pictures and charts	Move location of classroom supplies to minimize distractions	Keep graphs, charts or calendars of student progress
Highlight main ideas and supporting details in text	Assign student study partner	Establish contingency contract
Provide study outlines and guides	Provide one-on-one tutoring	Ignore inappropriate behavior

Reduce quantity of material to be read	Use small group instruction	Give verbal or non verbal signals (winks, hand signals etc.) to monitor behavior
Have student keep an assignment notebook	Provide a monitoring buddy	Move closer to student to monitor behavior
Provide a sample or practice test	Establish time expectations for assignment completion	Establish list of reinforcers for student.
Provide opportunities for extra drill	Provide verbal cues to indicate beginning and ending instructional time	Offer social reinforcers for student.
Use special supplementary material	Provide visual, tactile or auditory prompts to indicate inappropriate behavior	Offer tangible reinforcers (points, tokens, stickers)
Provide written text at student's reading level		Provide immediate reinforcement for correct responses
Provide self checking materials		Implement a token or point system
Provide immediate correction of errors		Implement self recording of behavior
Teach learning strategies		
Ask student to repeat directions		

Curricular adaptations target the academic tasks required for classroom success. Ideally, the classroom teacher analyzes student data and adapts learning objectives, materials, and teaching methods to ensure a better academic match between each teacher's instructional objectives and individual students' demonstrated academic or social behaviors. Taping lessons or texts, using parallel instructional materials, or giving a test in segments are examples of curricular modifications that teachers may use to provide support to a student experiencing academic difficulties. *Environmental adaptations* focus on analyzing and adapting the classroom ecology to accommodate individual learners. For example, general educator may provide preferential seating, establish time expectations for assignment

completion, or move instructional supplies to reduce distractions to help a student experience classroom success. *Management adaptations* are designed to provide behavioral support to a student. These adaptations offer reinforcement for appropriate behavior as well as environmental—behavioral support for students. Providing daily or weekly progress reports, using nonverbal signals to monitor behavior, or using tangible reinforcers are only a few examples of early interventions that may be implemented for students experiencing behavioral difficulties.

Unit- end activities

- **Objectives questions**

Group A

Tick the best answer.

1. It is important to note that placement in inclusive classroom settings and accesses to the general education curriculum are important issues for _____students with disabilities

a) All
b) some
c) few
d) many

9. The RtI model emphasizes early _____, with a focus on making sure children receive appropriate instruction at the 'first tier" or general education classroom level, and the push to match instruction to a student's needs based on ongoing classroom assessment common needs

a) interest
b) implementation
c) intervention
d) involvement

10. In order for the inclusion to be effective, there must be _____ between general and special education teachers.

a) consideration

b) collaboration

c) diplomacy

d) bureaucracy

11. Research supports that teachers themselves are influenced by parental_____

a) advancement

b) development

c) involvement

d) entrapment

12. Probably the best method of reporting pupil _____is through properly structured parent—teacher conferences

a) abbess

b) progress

c) regress

d) impress

Group B

- Subjective questions

Short answer questions

IX. Write about teacher assistance teams (TAT).

X. What is the significance of collaborative team-centered relationship between school personnel and family members ?

XI. In what way does parental involvement affect the education of child with special needs?

Group C

- **Long answer questions**

vii. How to ensure effective inclusion of students with disabilities?

viii. Write about the important of RtI model.

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