Course: Educational Adaptation for Children with Physical Disabilities Pass-II

SEMESTER: AUTUMN, 2018

(3610)

ASSIGNMENT# 1

Q.1   Write a detailed note on the interdisciplinary approach. How does interdisciplinary approach influence an intervention program?

Ans: **Interdisciplinary approach**.

An **approach** to curriculum integration that generates an understanding of themes and ideas that cut across disciplines and of the connections between different disciplines and their relationship to the real world.

Man is a part and parcel of society. He not only satisfies his quality of living but also quality of life. The quality of living enhances his economical aspect of life, which fulfills his bread and butter aim. On the other hand the quality of life helps to flourish all educational efforts in an equitable social order. Thus it can be said that education cannot be separated from the real life experiences. Education being the pivotal point around which ethical, religious, spiritual, physical and psychological aspect of human being revolve. All these aspects are so closely interwoven with one another that if any of its aspects are removed, education fails to achieve its aim.

The aim of education is the unification of knowledge existing in different branches of learning. In social science we study different aspects of human life and its various activities. The process of water-tight compartments of subjects will not give a clear picture of a complete society. Education is a social science in which we study educational activities of human beings in association with other members of a common society. Therefore there is a close relationship with other subjects. No subject can be taught in isolation. Education grows itself in society, made for the society and by the society, which go to develop a nation.

The existing system of education is alienated from real life. There is a gap between the subjects and the objectives and so cannot achieve the objective of national development. The following problems will reveal that there is a gap between the existing systems of education and real life situation: -

*   Education does not attach importance to agriculture.
*   Education does not achieve the goal of economic development.

*   Schools and colleges do not stress on nation- building.

*   No importance is given to ethical, religious and spiritual values.

The national development objectives can be achieved if the above points are fulfilled as all the above facts are interrelated.

The objective of interdisciplinary approach is to give practical shape to the knowledge of various subjects. The education commission has clarified the idea by giving the example of education as a subject. Therefore subjects like physics, chemistry, Mathematics; economics etc. inter related courses can be useful. The Kothari Commission felt that the interdisciplinary approach should be dealt with departments having close relationship. For example education may be offered a new combination with subjects as education and psychology, education and philosophy and education and sociology. Philosophy is the reflective or the thinking process where as the education deals with the implementation of things already philosophized.

Psychology is the science of behavior which education tries to bring out in man's personality. Similarly sociology is the science of society of which education is a part.

For the success of interdisciplinary approach the Kothari Commission established educational departments in four or five universities with the help of UGC. These departments will: -

*   Ensure research development in interdisciplinary approach.

*   Organize summer training to encourage inter disciplinary approach.

Interdisciplinary approach is a technique or tool that establishes reciprocal relationship for better understanding of the subject. No knowledge is permanent unless we correlate one subject with the other. Knowledge is an indivisible whole and cannot be divided. There is a definite relationship between an engineer and a cotton producer because it is a joint venture of the two that a cloth is made. Correlation between subjects or inter-discipline is essential because it: -

*   Makes knowledge stable.

*   Enables to acquire knowledge in a short period.

*   Develops interest in the reader.

*   Lightens the burden of curriculum.

*   Makes knowledge broad based.

*   Develops various human and social activities such as cooperation generosity, harmony etc.

*   Maintains correlation with life.

Education deals with activities in regard to his livelihood. Since livelihood cannot go on without other aspects of social life i.e. social values, norms and standards. Therefore education must be correlated with other subjects. This co-relation between education and other subjects can go hand in hand only if activities of one influence the activities of the other.

This interdisciplinary approach can be strengthened if in Educational research work people choose the topic of one discipline, which shows relevance to another discipline. This should be conducted by team working in interdisciplinary spheres. At the most one supervisor may be assisted by a co-supervisor, both having mastery over two different discipline. Therefore the Ph.D. degree awarded will not possess stamp of one department but of two departments. For example the topic "A Critical Evaluation of Contemporary Indian Theories of Education", can be claimed by both the department of philosophy and education. It is highly philosophical as the topic deals with the philosophical thinking of the philosophers who are educationalists also.

Life is complex, therefore a liberal and eclectic approach should be encouraged. In order to study the complexities of education interdisciplinary study between the department of education, sociology, philosophy, psychology etc. is the need of the hour. Subjects like educational psychology, educational sociology, educational philosophy, comparative religious study etc. should be in vogue in the present day situation. Interdisciplinary approach is an excellent means to creating harmony between various levels and faculties. It is required for a long term plan for any specific study. Knowledge is a unity and in order to maintain its unitary nature it is essential to adopt the interdisciplinary approach.

Interdisciplinary studies involves the combining of two or more academic disciplines into one activity (e.g., a research project).[1] It draws knowledge from several other fields like sociology, anthropology, psychology, economics etc. It is about creating something by thinking across boundaries. It is related to an *interdiscipline* or an *interdisciplinary field,* which is an organizational unit that crosses traditional boundaries between academic disciplines or schools of thought, as new needs and professions emerge. Large engineering teams are usually interdisciplinary, as a power station ormobile phone or other project requires the melding of several specialties. However, the term "interdisciplinary" is sometimes confined to academic settings.

The term *interdisciplinary* is applied within education and training pedagogies to describe studies that use methods and insights of several established disciplines or traditional fields of study. Interdisciplinarity involves researchers, students, and teachers in the goals of connecting and integrating several academic schools of thought, professions, or technologies—along with their specific perspectives—in the pursuit of a common task. The epidemiology of global warming requires understanding of diverse disciplines to solve complex problems. *Interdisciplinary* may be applied where the subject is felt to have been neglected or

even misrepresented in the traditional disciplinary structure of research institutions, for example, women's studies or ethnic area studies. Interdisciplinarity can likewise be applied to complex subjects that can only be understood by combining the perspectives of two or more fields.

The adjective *interdisciplinary* is most often used in educational circles when researchers from two or more disciplines pool their approaches and modify them so that they are better suited to the problem at hand, including the case of the team-taught course where students are required to understand a given subject in terms of multiple traditional disciplines. For example, the subject of land use may appear differently when examined by different disciplines, for instance, biology, chemistry, economics, geography, and politics.

Development of intervention

As existing literature reveals that inadequate physical activity levels and unhealthy eating habits are the two most prevalent causes of childhood obesity we divided our intervention into two parts–the first focusing on nutrition and making healthy food choices and the second focusing on exercise and making active lifestyle choices. The intervention strived to promote better nutrition knowledge and healthy eating habits, increase children's physical activity levels, prevent obesity, and assist in maintaining an improved lifestyle.

The developed intervention consisted of PowerPoint slides containing both words and pictures and was designed with detailed objectives in mind (**Table 1**). As the students involved were in their middle childhood years, we hypothesized they had the ability to group items into different subsets. This hypothesis was drawn from Jean Piaget's cognitive development theory, which suggests third graders' ability to use seriation and to categorize items .As third graders are in the concrete operational stage of this theory, our intervention constantly required them to group items into categories. As children in this age are also expected to be able to use seriation, we utilized MyPyramid as a constant visual aid to explain to the students that the different column width of each food category corresponds to healthy relative portions.

1. Students will be able to identify all the food groups of the food pyramid
2. Students will be able to identify which foods belong to which groups of the food pyramid
3. Students will be able to identify the health benefits of foods from each of the categories of the food pyramid
4. Students will be able to recognize the importance of exercising on a regular basis
5.Students will be able to identify various ways of exercising

Table 1: Nutrition and Health Education Intervention Objectives

During the development of the PowerPoint presentation, we made constant efforts to include vibrant pictures of foods and to refer to a diagram of MyPyramid .The continuous referral to this diagram aimed to enhance knowledge retention, as visual presentation of information has been shown to facilitate the learning and recall of information better than auditory presentations alone Thus, while we verbally elaborated on the information presented on each slide, almost all slides comprised mainly of pictures.

Delivery of interventions

We delivered the same intervention at two points in time, once in the fall of 2010 and again in spring 2011, 6 months later. This was done to investigate the effects of repeated intervention as opposed to that of a single intervention.

The intervention and the completion of questionnaires took place for approximately one and a half hours on two separate Friday afternoons and were scheduled during times when no academic classes were planned. The delivery of intervention consisted of three parts: 1) a two-minute frame for third graders to share their favorite foods; 2) a 30-minute PowerPoint presentation focusing on the different groups of MyPyramid and the <u>nutritional benefits</u> of each for the human body; and 3) a 20-minute PowerPoint presentation focusing on the importance of exercising. Throughout the intervention, we asked the students to actively participate by answering questions about recently presented slides to promote dynamic learning and repeated information processing.

The nutrition-based slides were organized by food groups and all followed a similar pattern .The exercise and active lifestyle portion of the intervention began with a discussion with the students about the kinds of exercise they enjoyed and why they believed exercise was beneficial for the body. After this point, the active lifestyle and exercise slides were introduced to share more explanations for the importance of exercise.

Q.2   What are the major competencies required for a teacher of special children? How these competencies can develop through teacher training programs?

Ans:

Teachers are the cornerstone of children's development. A solid teacher offers inspiration and encouragement so that students achieve success inside and outside the classroom. When it comes to children with special needs, teachers must possess characteristics that help them deal with physical and cognitive disorders.

This career is in high demand, and employment growth is expected to expand by 6 percent over the next decade. Here are five effective traits of every special education teacher.

Patience

When a child has special needs, patience is a must. Since this type of student takes longer to perform simple tasks, understanding is key for development. No matter how long it takes, a special education teacher must give a child time to complete the task. Having a good sense of humor will help along the way. Although the classroom is a place for serious learning, dealing with a special needs child will require the ability to create a cheerful environment that empowers this type of student to gain success. Also, it is up to this teacher to take time and comprehend each student's individual needs so that frustrating situations can be avoided.

Organization

Organization is key for all teachers, especially those who deal with disabled students. When a child is taught in an organized environment, he or she will have higher confidence levels. There are numerous ways a teacher can remain organized. For example, it is possible to use color-coded folders and notebooks. To cut confusion, it is wise to label various areas of the classroom.

Every special ed teacher must keep records so that he or he can accurately report students' accomplishments to administrators and parents as well.

Creativity

Since all children have different learning styles, a special education teacher must have the ability to adapt lessons that work for the strengths of each child. In certain circumstances, students may function well but have social interaction problems. Others may not be able to perform basic speaking or motor skills. While designing daily activities and plans for the classroom, a teacher must get creative in order to accommodate all of the children's needs. Since disabilities may manifest differently each day, planning must remain flexible as well. There must be time to deal with outbursts or other roadblocks. New teaching techniques are developed on a regular basis, so a special education teacher must remain abreast of the most effective methods.

Acceptance

A special education teacher works alongside disabled students with various problems. No matter the issues, this professional must accept all children and interact with dignity and respect. Even children who are unable to communicate properly or function at low developmental levels sense negativity, especially when a teacher is acting in an uncomfortable manner. It is key to create a sense of value within the classroom so that all children have the maximum chances of gaining success.

Intuitive and Calming Nature

Certain children find it difficult to express their feelings, especially when they have communication problems. Oftentimes, special needs students withdraw or act negatively when they get confused or feel overwhelmed. A special education teacher must use his or her intuitive skills to uncover the underlying reasons behind the poor behavior.

Also, it is essential to provide a calm temperament when dealing with these type of students. Many children must balance behavioral and learning issues, so a classroom environment can be extremely stressful. An effective teacher will be able to calm his or her students so that anxiety is reduced. When children feel safe, they are more likely to be open to learning.

Special education teachers require a number of skills different from traditional educators. They play a vital role in the classroom and must work hard to maintain balance. The above traits are just a few characteristics that create an environment that works well for children with physical and emotional disabilities. When a teacher possess these virtues, special needs students are sure to thrive.

Detail-oriented.

One specific aspect of being a well-organized teacher is having the ability to pay close attention to detail. Special education teachers are consistently assessing students through formal and

informal methods, where details make a difference. When applying for jobs special education teachers may notice that "attention to detail" is listed as one of the requirements for the application.

Deadline-oriented.

Sticking to a clear schedule helps children stay calm by creating expectations through a daily routine. Additionally, special education teachers play an important role in a child's goals for the year through their Individual Education Plan.

Adaptability.

Teachers must be adaptable as you never know what may happen in the classroom. Children may have outbursts, meltdowns, and disruptions due to leaving the room to attend mainstream classes and meetings with therapists. A teacher has to be able to maintain order, keep to a schedule, and be flexible as all of these situations may arise. Modeling adaptability is important because children with special needs often need to learn how to adapt to their surroundings based on their disability. A teacher who demonstrates this effectively teaches the child how to do so in different situations.

Good sense of humor.

A great special education teacher should be able to recognize the appropriate times to have a good laugh and help shift the atmosphere of the classroom to a more cheerful one. A good site to bookmark for humorous articles that special education teachers can relate to is The Lighter Side links on the *From Emotions to Advocacy* website.

True love of children!

The top nine traits on this list are all very important for a special education teacher to have. However, none are as important as having a true love of children. Children instinctively know when they are loved and a teacher plays a key role in their development. It is imperative that teachers feel a genuine love and joy for children and their chosen career.

Teachers training programs to enhance their abilities

The term refers to ways of enabling teachers to develop their ability to help students to learn. It can denote a range of activities and have a variety of outcomes

Activities

- Attendance at courses on teaching
- Attendance at sessions on aspects of teaching, such as lecturing, running tutorials
- Having one's own teaching observed and commented upon
- Observing others teaching (learning by example)
- Discussion of issues, such as planning and evaluating a session, with a respected teacher

- Reflecting on one's own teaching and trying to identify what aspects are helpful to students' learning and which are not
- Studying student feedback, whether written or verbal, to identify what students report as being helpful and unhelpful to their learning
- Mentoring of a new teacher by an experienced colleague

Outcomes

- Better understanding of what helps students to learn
- Acquiring techniques—for example, on how to encourage participation or how to lecture effectively
- Gaining ideas on ways of structuring information to make it more accessible to students
- Feeling more motivated and more able to engage in teaching
- Valuing teaching more highly

Questions teachers might ask themselves

- What is it that I want to be able to do differently?
- Do I need more knowledge about the learning process?
- Do I need to know more about the techniques and methods of teaching?
- Do I need to examine the way in which I view my teaching and, maybe, change this?
- Are my problems in teaching mainly organisational? For example, too few patients on the ward who are suitable for my students to learn from, or lack of a reasonable room in which to run an interactive small group session.
- Do I need to gain feedback about how I am doing as a teacher?
- Do I need more practice in certain areas, such as writing learning objectives or producing a lecture at a suitable level for first year undergraduates?

An alternative format for giving feedback

- The microteaching session takes place with a course participant acting as teacher and therefore the prime learner
- An observer who may be the course organiser or may be a course participant takes notes in chronological order
- After the microteaching, the prime learner and those who have been taught, make brief notes about the experience
- The course organiser invites the prime learner to say how s/he found the experience and whether s/he thinks that the learning outcomes were achieved and to make any other pressing comments
- The course organiser then invites each participant in turn to say what they learnt and how they felt about the experience. Participants are asked to use "I" statements and comment only on what they actually experienced, to be specific, and to avoid interpretation ("I think you meant...") or advice giving ("I think you should ...")

- When all participants have spoken, the observer adds points not already covered, again sticking to what was actually observed and striving to be clear and specific
- If appropriate, the course organiser may add comments if there are points which have been missed and to emphasise positive points
- Finally, the prime learner has a chance to make any further comments, but is encouraged not to justify or defend. Advice can be invited if required at this stage. The prime learner is invited to note down one or two key learning points at the end of the session

Phase I: Planning—questions
- Students • What year/level? • What have they experienced and covered so far? • What knowledge and skills should they have? • What will they be going to do later in the course?
- Learning outcomes • What exactly do I want students to be able to do by the end of this teaching episode?
- Content • What information do the students need to gain and/or what skills do they need to practice and/or what experiences do they need to have in order to attain the outcomes I have listed? • How will I structure the content?
- Timing • How much time has been allocated? • How much time should I give to each section?
- Methods etc • What methods/techniques/teaching aids will be appropriate to achieve the outcomes?
- Assessment • Will there be any? • Will it be formative or summative? • Will the students receive feedback and if so, how?
- Practical points • Venue, equipment—are they suitable to meet the outcomes?

   Phase II: Implementation
- Building skills—for example, the ability to examine a shoulder joint
- Transmitting information—for example, describing the key features of the locomotor system

- Encouraging students to examine their attitudes—for example, by running a small group discussion on impaired mobility

   Phase III: Evaluation
- Were the planned outcomes achieved?
- In retrospect, were these appropriate?
- What seemed to help the students to learn?
- What seemed to hinder their learning?
- What can I do about these factors?
- How satisfying was the teaching for me and why was that?
- What does that tell me for next time?
- Do I need any help with teaching and, if so, where will I get it?

Q.3 Describe the role of a special education teacher in making arrangement for the independent living of cerebral palsy.

Ans:

Special education is the general term used to describe the variety of educational programs and services available to help students to learn and, ultimately, prepare for adulthood. Special education programs and services assist children with disability in obtaining an education in the least restrictive educational environment possible.

Special education is designed to maximize your child's learning potential

Discovering their child requires special education services can, at first, be disheartening for parents. However, parents quickly find that special education is designed to specifically enhance their child's opportunities to learn, socialize, thrive and mature.

Current legislation recognizes "Disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society. Improving educational results for children with disabilities is an essential element of our national policy of ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities."

Congress recognized that prior to the enactment of the Education for All Handicapped Children Act of 1975 the educational and civil needs of those with disabilities were not being fully met in the public school system. Since the Act, members of Congress have improved education policies, accessibility to education and inclusion by specifically addressing the following within the public school system:

- **providing appropriate educational services for those with disabilities**
- **securing inclusive and accessible access to the public school system and educational learning opportunities**
- **providing opportunities to be successfully educated alongside peers**
- **discovering ways to identify previously undiagnosed disabilities which prevented a successful educational experience**
- **securing adequate resources within the public school system so as not to drive families to find services elsewhere**

School is a learning environment. Special education programs are designed to evaluate a child's abilities and needs in order to devise a plan to educate the child with disabilities. Increased efforts have begun to include students with special needs as completely as possible within the broader school community as well as within society at large.

Society's overall view of students with special needs has shifted, with less emphasis placed in defining students by the nature of their disability or impairment and more on promoting their ability and potential.

Toward that end, the U.S. Department of Education Office of Special Education states its mission as "provid(ing) leadership to achieve full integration and participation in society of people with disabilities…" The emphasis is on developing supports and services that promote

accessibility and inclusion so an individual with special needs can learn, live, work, travel and participate within society independently and without obstacles.

Underscoring that goal, laws are in place to clearly define and protect the rights of special education students, as well as to give parents (or legal guardians) an increased role in determining the type of services their student receives.

Special education: The role of legislation

In the United States, special education programs are guaranteed by such laws as the Americans with Disabilities Act, the Rehabilitation Act of 1973, and the Individuals with Disabilities Education Act, more commonly known as IDEA.

Though individual programs can vary by state, federal law specifies that all special needs students must be provided a Free Appropriate Public Education, or FAPE, from preschool through age 21.

The Individuals with Disabilities Education Act specifically defines those students who qualify for special education services and supports as a "child with disability" whose educational performance is adversely affected. IDEA defines 'child with a disability" as a child between the age of 3 through 9 years of age that may, "at the discretion of the State and the local educational agency, include a child (i) experiencing developmental delays, as defined by the State and as measured by appropriate diagnostic instruments and procedures, in 1 or more of the following area: physical development; social or emotional development; or adaptive development; and (ii) who, by reason thereof, needs special education and related services." Potential special education students are eligible under 13 specific category definitions as defined in the IDEA:

- **Autism**
- **Deaf-blindness**
- **Deafness**
- **Emotional Disturbance**
- **Hearing Impairment**
- **Mental Retardation**
- **Multiple Disabilities**
- **Orthopedic impairment**
- **Other health impairment**
- **Specific learning disability**
- **Speech or language impairment**
- **Traumatic brain injury**
- **Visual Impairment**

Those with Cerebral Palsy are specifically covered under the law's provisions for students with orthopedic impairments.

IDEA also specifies the types of services to be provided as well as the setting. It includes the possibility of mainstreaming – placing the student with special needs in a regular classroom setting for a full or partial school day.

Special education services are provided under specific plans or programs, each determined by the student's age, abilities, needs, and environment. It is drafted with input from parents and school officials.

From birth to adulthood

Unlike general education programs, special education programs can begin before age 2 and continue until a student is 21. Federal mandates require a highly specialized education program for each student. They also require that states conduct Child Find activities. Child Find is an effort required under IDEA to identify individuals with disability or impairment within their jurisdiction who may benefit by early intervention and special education programs and services.

An Individualized Family Service Plan, or FSP, is drafted on behalf of those students age 2 or younger.

Such a plan includes input from parents as well as those providing health care and other specialized services to meet the child's specific needs.

Designed to provide a unified plan to monitor and encourage the child's development, the FSP sets family goals and emphasizes everyday learning opportunities, both indoors and outdoors.

An Individual Education Program, or IEP, is required for those three and older.

Parents are included on the team that drafts their student's IEP. Other members commonly include teachers, special education teachers, curriculum specialists as well as other staff members depending upon a child's individual needs.

IEP reports, generally issued along with student report cards, include an up-to-the-minute evaluation of the student's academic performance and functional ability, outline measurable yearly goals, and list the accommodations and services each student will receive.

Physical therapy, counseling services, assistive technology, as well as mobility assistance and transportation services, as needed, are among the items covered.

Parents (or legal guardians) are part of the team that drafts their student's IEP and the program cannot be implemented without their written consent. District teachers and curriculum specialists are also part of the team. The student may also be included.

Regularly-scheduled IEP team meetings also allow parents to review their student's progress and give feedback as to how the overall program is – or isn't – meeting their student's needs.

A Transition into Adulthood Plan, covering the student's education up to age 21, is required by the time the student turns 16. At age 16 to 21 the emphasis is on developing vocation.

Mainstreaming and other settings

Special education services are provided in a variety of settings.

Mainstreaming, placing special needs students into non-special education has become an increasing aspect of many special education programs.

Mainstreaming is seen by many educators and advocates as allowing special education students to better connect with others. While encouraged whenever possible, mainstreaming is not guaranteed for all students.

Instead, federal law calls for education to be provided the Least Restrictive Environment, or LRE.

Under the LRE concept, special education programs may be provided individually or in classes including students with similar needs. Some programs may even be provided outside a traditional school setting, including at the student's home.

In some areas, options may also be available to have the student educated in home school, health care facilities, or private school settings.

Parental role

Special education in the U.S. is based upon a team approach including parents and educators though parents also retain their rights as advocates for their student.

In addition to their required participation in drafting an IEP, parents retain the right to challenge any or all aspects of their student's educational program.

Challenges can be made – and modifications suggested – during regularly-scheduled IEP meetings. Parents also have the right to include outside individuals, including but not limited to doctors and therapists, on the IEP team.

Should disagreements remain; parents can also seek mediation allowing an impartial outside observer work with all parties to reach agreement. Should that fail to produce an agreement, parents may also seek a due process hearing in which the outside specialist mandates a settlement after hearing from all sides, or even appeal to the agency governing education in their state.

Meeting the challenge

While individual circumstances might vary, special education students can succeed, both academically and in the broader society, particularly with an effective IEP is in place.

Special education isn't a privilege but a right of every child. IEP's are written plans, carefully constructed with a particular child's best interests in mind, which commits a school's resources towards specific measurable goals and objectives. IEP's are reviewed, monitored and revised with the best intention of providing services to advance a child's learning potential. Parents remain the best advocates to assure their children's rights are upheld.

Literature from other cohorts
Children and young people
The seeds of independence in adulthood must be sewn at the earliest age. Where family, teachers and peers give messages of individual identity and capacity, a child or young person will come to see him or herself in a positive light, conducive to independence.

Literature about promoting independence and self-determination in children focuses on assisting the child to express choice, identify preferences, have some sense of control over their environment and a sense of autonomy in the own live. Some examples of self-determination in early childhood are choosing playmates, where to create a block tower, or getting napkins from the drawer to help set the table for dinner.

For children with disability, acquiring skills related to self-determination and independence is especially important. As their freedom to move around, express themselves clearly or interact

with others may look different than what other children typically do. The challenge for families is to avoid overprotecting a child or preventing the child from taking even small risks, leading to a sense of helplessness and dependence rather than self-reliance.

There are few studies in this area but literature aimed at parents encourages independence, recognising that many children with disability are sheltered from taking risks. Parents are told that and take responsibility for the decisions and choices they make.

In order to promote independence, parents are encouraged to enable children to make choices in as many areas of their life as they can. Factors seen as facilitating independence include having reliable information, a good self-image, some personal privacy and space, having the freedom to make mistakes and having the support of other people. Other factors include being able to initiate requests for assistance from people who are paid to provide care and having aids and gadgets that enable the child to do things without help.

In addition, age appropriate opportunities to develop friendships and networks, take risks (supported by safeguards), spend time away from family and be supported to interact with others away from parents and paid people will contribute to identity formation and age appropriate independence.

Considerations for people with additional vulnerability (ATSI, CALD, rural and remote)

People with additional vulnerability include Aboriginal and Torres Strait Islander (ATSI) people, individuals from a Culturally and Linguistically Diverse backgrounds, and people from rural and remote areas. See discussion in Reasonable and Necessary Support across the Lifespan: An Ordinary Life for People with Disability paper.

Systemic barriers to independence

Whilst the service and education systems talk about promoting independence, there are many practices in early intervention, in disability services and schools that promote dependence rather independence. Old style early intervention often left parents with the unspoken message that children learn best in one to one interaction with a skilled adult. The value of environmental learning from peers, from interaction with family and from free play was underplayed. It led many parents to seek wrap around support (from teachers' aides) in early childhood settings and in school. Whilst this is not the case in contemporary practice, parent anxieties often turn into a demand for full time support that gets in the way of forming relationships with peers and moves to independence.

The vast majority of schools, both regular and special schools, have a tendency to attach staff to students creating learned helplessness, dependence and thwarting the development of natural networks of helpful friends. Whilst some students do need significant support, it must be crafted very carefully in order to facilitate opportunities for other children to interact and assist where necessary. Enabling children with disability to learn to appropriately ask their friend or classmate for assistance is a skill of independence that cannot be acquired if adults surround a child.

Disability services also provide support in ways that promote dependence. The much sought after individualised funding is too often used as a paid friend with whom a child, young person or adult can share an outing. Whilst pleasant at the time, paid friendship promotes dependence and only creates the demand for another slot of paid friendship. Where support workers are guided by expert facilitation and trained to understand their role as life facilitators rather than paid friends, their efforts are much more likely to lead to opportunities for relationships with community

members and a sense of belonging. This has been referred to elsewhere as 'technical support' and is a necessary underpinning to enable individualised support to promote independence rather than dependence.

Service models that group people with disability significantly impede independence. Group homes and day programs have developed under the guise that people with disability are better off with 'their own' and because limited imagination anticipated that all support had to come from paid workers. Research affirms better quality of life without necessarily additional cost occurs when paid support is used to compliment informal support of family and friends to enable even people with high support needs to live in their own homes and enjoy valued roles in the community. What is often not recognised in funding formulae is that many people with disability do not easily form relationships with people who want to play a role in their lives and so investment in the development of informal support is required in order to enable this type of lifestyle.

The attitude of services to risk has a major impact on opportunities for independence. Fear of work health and safety claims have led services to avoid risk rather than mitigate risk through prudent planning and safeguarding. Ordinary activities of life become constrained as common sense gives way to restrictive processes robbing people of ordinary opportunities for a rich life.

There are many societal barriers that impede independence. Most people think of disability as a tragedy and whilst almost everyone would avoid its challenges, this attitude has a profound impact on the relationship others extend to a person with disability in ways that are often not helpful for a full and independent life. These attitudes create a view of people with disability as dependent clients who need to be cared for rather than citizens who want the same basic things as everyone else and may need some assistance in order to contribute. It turns the unique role and authority of parents into a status of carers that confuses people who deeply love and care about a person with people who are paid to provide service (and often do not care a great deal).

Compounded by poverty, these attitudes reinforce low expectations of people with disability that too often lead to the self-fulfilling prophesy of lives deprived of meaning and contribution.

Finally, and most fundamentally, where people are not exposed to different ways of doing, to different ways of living, they are deprived of opportunities to see that despite significant disability, people can lead independent valued lives included in their communities.

What might independence look like?

Many people with disability, especially people with high support needs are forced into grouped models of service provision on the basis of cost. These equations seldom take account of the cost to the individual and society of increased dependence and poor quality of life, neither do they consider the high cost of maintaining capital associated with many grouped models.

Optimal independence occurs when people are included in community, using paid support to complement informal support provided by family and friends. Optimal independence is about inclusion.

In order to promote maximum independence, it is recommended that discussion about reasonable and necessary support encourage movement along the continuum of maximising independence in all life domains. Vision building will often be important, as will deliberate strategies to build informal support, asa life surrounded by paid people is unlikely to yield the richness and independence sought and is also likely to be beyond the capacity of the NDIS to sustain.

NDIS planners will need to be proactive in opening conversations that participants may not have had. For a significant proportion of people, support to become more independent will require upfront capacity building and continual mentoring. It will also require planners to brainstorm with people the potential barriers to further independence and strategies to overcome those barriers, including adjustments to current arrangements to facilitate greater independence. The need for intentional strategies cannot be underestimated.

Finally, services delivering supports must take active steps to promote independence including through the adoption of evidence based approaches such as 'Active Support'.

In summary, assisting participants to move toward independence requires:

- An encouraging, enabling approach that inspires people to try, supports and rewards their efforts and provides a pathway, not a prescription or a punishment.
- A recognition that asking and encouraging will often not suffice. Participants need assistance to identify adjustments required, including adjustments to the expectations of others and to the way in which support is usually delivered to facilitate greater independence. If independence was easily achieved, in most situations the participant would already be independent in the specified domain of life.
- A recognition of the critical role of peers in promoting identity and providing role models for greater independence. The development of relationships with people without disability may be a necessary first step to increase expectations and provide age appropriate guidance.
- A recognition that too much paid support may inhibit the development of freely given relationships with ordinary people. Participants and their families may require targeted support to develop informal support.
- Identification of possible ways in which technology may facilitate less dependence on paid support.
- Supported opportunities for risk taking – supporting the participant to move gently beyond his/her comfort zone to facilitate a learning opportunity from a challenge. Much work may be needed with family and service providers to facilitate an opening in which a challenge may be possible.
- The implementation of conscious strategies such as Active Support in grouped living environments. This requires staff to provide the right amount of assistance to enable service users to successfully take part in meaningful activities and social relationships irrespective of the degree of their intellectual and physical impairments. This approach means that a person might only take part in some parts of a task; they do not have to do it all or do it independently to be involved.

Table 1: Independence in Major Life Domains

Table 1: Independence in Major Life Domains		
Domain	**Independence measure**	**Strategies to promote independence**
Choice and control	Identity formation	Recognise and respect multiple identities of each individual e.g. encourage people to see themselves, for example, as a young woman, a member of a choir, a beach lover, not just a person with

		disability
Choice and control	Decision making	Actively encourage the use of a framework for supported decision making such as the Victorian 7 principles (Vic. DHS 2012) of: 1. I have the right to make decisions 2. I can make decisions 3. I might sometimes need help to make decisions 4. I might be able to make decisions about some things but not others 5. I can learn from trying things out 6. I might want to change my mind 7. I might make decisions others might not agree with Encourage and support people to make daily life decisions – when to get up, go out, where to go In planning meetings, take steps to enable people to make big life decisions e.g. where they live, what work they do, the services they use
Choice and control	Self-determination (have authority and are supported to direct and manage their own services)	Help people to take steps to move along a continuum from: Other people direct and manage the services for the individual Learning to manage and direct their own services Supported to manage and direct their own services Able to manage and direct their own services
Daily life	Increasing skills toward self sufficiency	Provide training to facilitate increased skill Provide support to decrease reliance on paid support
Daily life	Active choices around nature of assistance	Support people to make the adjustments required to choose who assists them, how they are assisted, when they are assisted and where they are assisted
Daily life	Travel without support on public transport	Provide travel training to assist use of public transport
Relationships	Existence of relationships with people outside family and paid staff	Support people to make the adjustments required to go out as an individual (not in groups) and to attend places at regular times to facilitate being known and valued
Relationships	Choice of relationships	Support people to choose who they have relationships with, how often they have contact with people and assistance to extend relationships if

		desired
Relationships	Pursue relationships in ways and frequency of choice	Support people to have contact when they choose and in ways that they choose
Relationships	Independence in interaction	Support people to spend time with a friend without staff or family being present
Relationships	Engage in safe sex	Provide people with training and support in sexual health
Home	Choice of home	Support people to actively choose the model of housing and support and who they live with and to actively plan to achieve this goal
Home	Control over support in the home	Support people to make the adjustments required to have control over who supports them, how they are supported, when they are supported and where they are supported, including when they get up and go to bed, what they eat, when they go out, with whom and where
Health and wellbeing	Self-reliant in coordination of health related supports	Support people to take steps toward understanding the screening and services they need for good health and assist them to make and keep appointments and implement recommendations from appointments
Health and wellbeing	Self-reliant in maintaining a healthy lifestyle	Support people to take steps toward understanding elements of healthy lifestyle and making adjustments required for a healthy lifestyle
Education and training	Participation in course of choice	Support people to choose and be supported in a mainstream course rather than a course for people with disability Support people to choose and be supported in a course in their area of interest
Work and valued social roles	Nature of employment or valued social role	Support people to choose and be supported in: - open employment over sheltered employment, and - valued social roles that demonstrate competence in the area of their choice
Social, community and civic	Nature of leisure activities	Support people to genuinely choose (as against from a menu of options) leisure interests and activities, including time and location, and their

participation		leisure partners
Social, community and civic participation	Engagement in mainstream community groups	Support people to become actively involved community groups that reflect their interests Support people to actively participate in community discussion about issues of interest.
Social, community and civic participation	Voting	Support people to understand the electoral system, to register and to vote

Q.4 Explain the curriculum goals for the Physically Handicapped Children (PHC). Elaborate the details of each goal.
**Ans:**
the curriculum for physically handicapped children is to take care of individual needs and at the same time keep it in line with the mainstream curriculum.
Under this premise, the learning areas

Physical, Humanities and Social, Moral, Linguistics, Mathematics, Science and Technology,
for mainstream schools are also suitable for physically handicapped pupils in general. However, the emphasis, content and time allocation of each area should be adjusted to cater for pupils' special needs. Generally speaking, the curriculum content should contain academic, cultural and practical subjects, but the time allocation and emphasis should be tailored and re-grouped according to individual characteristics.
Below is a diagram describing the need of subject elements in the curriculum of different groups of pupils in schools for the physically handicapped.
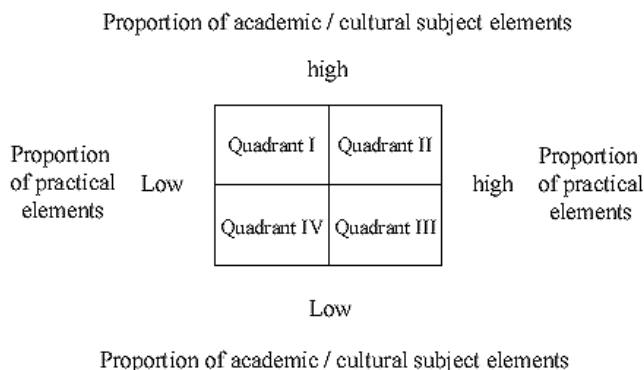
The above diagram is explained as follows:
1. The vertical axis represents the amount of academic / cultural subjects or knowledge and skills from academic / cultural subjects
2. The horizontal axis stands for the amount of practical subjects or practical knowledge and skills from other subjects
3. The four curriculum quadrants demarcated by the vertical and horizontal axis are :

The curriculum for Quadrant I is made up of higher proportion of academic subject elements but lower proportion of practical subject elements

The curriculum of Quadrant II is made up of equally high proportion of academic and practical subject elements

The curriculum of Quadrant III is made up of lower proportion of academic subject elements but higher proportion of practical subject elements

The curriculum of Quadrant IV is made up of equally low proportion of academic and practical subject elements

4. The proportion of need in academic and practical subject elements is decided by the characteristics of the pupils

5. In a school for physically handicapped children, there are more pupils requiring the first and third quadrants of subject element combinations. Seldom any pupils need the subject element combinations of the second quadrant and there may not be any need for the conditions shown in the fourth quadrant.

Curriculum Content

Based on the rationale mentioned in paragraph 4.3, the learning areas and general direction of mainstream curriculum are also suitable for children in schools for physically handicapped children but adjustment according to pupils' needs are required.

Generally speaking, pupils first admitted into schools for the physically handicapped may not have developed the basic skills like ordinary pupils first joining mainstream schools. To enhance the effect of learning and personal development of pupils, schools should add in or strengthen the teaching of the following basic skills :

perceptual motor,

basic language,

cognitive and

personal and social

adjustment skills.

For this reason, schools for the physically handicapped should enhance the development of the above mentioned skills in the Physical, Humanities and Social, Moral, Linguistics, Mathematics, Science and Technology, Aesthetics and Creative aspects of learning.

For pupils to acquire knowledge, skills and positive learning attitudes in the various learning areas, suitable academic, cultural and practical subjects must be taught. As for the
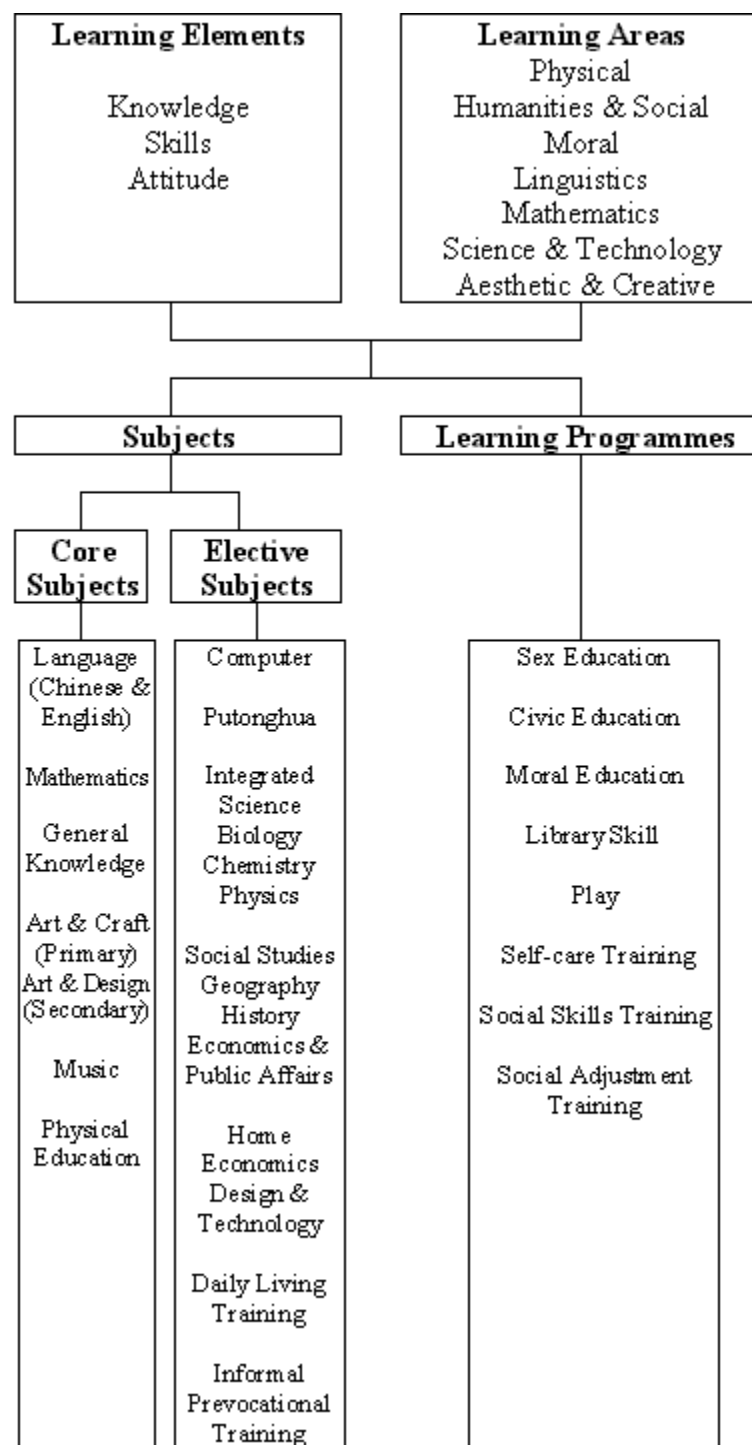
cross subject content or issues geared to the specific needs of physically handicapped children, they are not necessarily taught as independent subjects but can be diffused into the already existing subjects as special activities or integrated activities of the school routine.

The quadrants presented in paragraph 4.3 have expressed the needs of different groups of pupils. Nevertheless, to give pupils a comprehensive education, schools should teach their pupils the above mentioned seven learning areas so that they can learn as much knowledge, skills and good attitudes as they can. So the curriculum for their pupils should contain core subjects for every

pupil, elective subjects for pupils of different abilities and issue-based learning programmes specially designed to cover areas not included in the existing subjects. At the same time, teachers should pay attention to the ability of individual pupils in different subjects so that the subject content for each of them may be selected, modified, tailored or re-grouped accordingly.

Below is a suggested table of curriculum framework and content for special schools for the physically handicapped.

Table showing the curriculum framework and content for schools for the physically handicapped

Learning Elements	Learning Areas
Knowledge Skills Attitude	Physical Humanities & Social Moral Linguistics Mathematics Science & Technology Aesthetic & Creative

Subjects	Learning Programmes

Core Subjects	Elective Subjects	
Language (Chinese & English) Mathematics General Knowledge Art & Craft (Primary) Art & Design (Secondary) Music Physical Education	Computer Putonghua Integrated Science Biology Chemistry Physics Social Studies Geography History Economics & Public Affairs Home Economics Design & Technology Daily Living Training Informal Prevocational Training	Sex Education Civic Education Moral Education Library Skill Play Self-care Training Social Skills Training Social Adjustment Training

The content of different subject groups and programmes are elaborated as follows :

Core Subjects
In this curriculum framework, core subjects are taken by all pupils to acquire the necessary knowledge, skills and attitude for daily living, furthering their education and seeking

employment. So the core subjects for every pupil are similar but the content should vary in difficulty according to the abilities and needs of the pupils.

Core subjects for schools for the physically handicapped include :
(1) Language (Chinese and English)
(2) Mathematics
(3) General Knowledge
(4) Art and Craft (Primary)
Art and Design (Secondary)
(5) Music
(6) Physical Education

Elective Subjects

Some elective subjects can be considered as

extended curriculum for pupils who can manage the core subjects. So the election of subjects mainly takes place at the secondary stage for preparation for the Hong Kong School Certificate Examination or employment, but in the primary section, there may also be elective subjects geared to the ability, interest and aptitude of pupils. They are :
(1) Computer
(2) Putonghua
(3) Integrated Science
(4) Biology
(5) Chemistry
(6) Physics
(7) Social Studies
(8) Geography
(9) History
(10) Economics and Public Affairs
(11) Home Economics
(12) Design and Technology
There are yet other elective subjects for pupils to learn at different stages of schooling:
(13) Daily Living Training
(14) Informal Prevocational Training
Both the core and elective subjects can be included in the time table.

Learning Programmes

These programmes contain learning contents which may not be covered within the school time table. They may be programmes led by physiotherapists, occupational therapists, speech therapists and school social workers in collaboration with teachers. They may be offered in different modes but they are all geared to the psychological as well as physiological needs of the pupils. This would enhance their ability to acquire knowledge, skills and positive attitude.
Some examples of learning programmes are listed as follows :
(1) Sex Education
(2) Civic Education
(3) Moral Education
(4) Library Skill
(5) Play
(6) Self-care Training

(7) Social Skill Training
(8) Social Adjustment Training

Q.5   Discuss the role of physical therapist in the development of an effective educational program.
Ans:
The Role of the Physical Therapist

Children of all ages and abilities require strong motor performance for the academic and nonacademic tasks required during the school day. Physical therapists play a significant role in helping children attain optimal physical function. Physical therapy services in schools can benefit students with and without disabilities by supporting access to, participation in, and progress in their education. Knowledge of all domains of child development, age-appropriate evaluations and plans of care, health promotion and safety, and a variety of service provision models allows pediatric physical therapists to support the education of students). The following sections describe practice of physical therapy in the public school setting. The first section defines school-based physical therapy and its purpose in the educational environment. The second section discusses service delivery models commonly used by school physical therapists, as well as the types of educational problems addressed in each type. The third section outlines the evaluation procedures used to determine the appropriate physical therapy involvement, while the fourth section describes interventions commonly used in the educational environment.

School-Based Physical Therapy – What Is It?

Physical therapists working in schools provide services to support student participation and progress in their education. The emphasis of school-based physical therapy services is the identification of and intervention for functional, behavioral, and learning challenges that limit the success of student learners. A variety of nonacademic functional tasks are needed to participate in the various learning activities of a school day. Physical tasks and cognitive-behavioral tasks are two broad categories of these nonacademic functional skills that can be supported by physical therapy services. Some of the physical tasks utilized in a school day are school and classroom mobility, access and participation in school and classroom activities, management of materials and devices, and participation in recreational activities. Following social conventions, task behavior and completion, behavioral regulation and safety are some of the cognitive-behavioral tasks needed for school performance

School-based physical therapy practice is based on the International Classification of Functioning, Disability and Health (ICF) model of health and disability. The ICF is a biopsychosocial model that describes an individual's functioning and disability from three

perspectives: body systems, individual functional capabilities, and performance in life roles,). These three perspectives (body, individual, and societal) are all considered health components. Body level functioning describes anatomical, physiological, or psychological function such as muscle strength and flexibility, intelligence, and ability to attend. Functioning at the individual level describes the capabilities of the individual, while the performance of the individual in different life roles describes societal level functioning. Communication, mobility, self-care, self-regulation, learning, and social interactions are examples of functioning at the individual and societal level. Additionally, the ICF assumes that contextual factors (environmental and personal) may positively or negatively affect an individual's functioning environmental factors are influences that are outside of the individual's body or his or her control such as medications, braces, family, educational supports, and laws. Personal factors are influences that are characteristics of the individual that are not a direct result of his or her health functioning such as race, age, gender, and coping style. According to the ICF, a child's function and disability are the result of the interaction between the characteristics of the child and the environment. As such, in the school setting, a student's participation and engagement in school activities would be the result of the dynamic interaction of the student's characteristics and the school environment. For example, a student's failure to complete classroom assignments (societal level function) may be the result of muscle weakness and coordination (body level function), difficulty holding a pencil or sitting in a chair (individual level function), chair seat height compared to desk height (environmental factor), and/or lack of motivation (personal factor). Early identification of the factors contributing to school performance problems is key to developing appropriate strategies to support student learning and participation

n order to work with children, physical therapists need knowledge of the issues related to this population that spans from birth through adolescence. In 2014, the Section on Pediatrics of the American Physical Therapy Association recommended five core competencies that should be attained by all physical therapy graduates). The attainment of these core competencies ensures that practitioners possess the knowledge, skills, and abilities needed to work effectively with children of differing ages and developmental stages. The five core competency areas were: (1) domains of human development with an emphasis on motor development; (2) age-appropriate child and caregiver management; (3) family-centered care in all interactions; (4) health promotion and safety; and (5) legislation, policy, and systems. The successful implementation of a physical therapy program within the school setting requires skills and knowledge that may differ from pediatric practice in general. In 1985,

faculty from Hahnemann University received a grant to develop competencies to address these unique requirements, but these competencies were never published. In 2007, Effgen and colleagues updated these competencies to reflect contemporary practice, regarding changes in practice, legislation, and terminology. Nine competency content areas were identified as central to working in education environments, including: (1) knowledge of the structure, goals, and responsibilities of public schools; (2) knowledge of practices for promotion of wellness and prevention of injury or disability; (3) collaboration with students, families, and school personnel; (4) evaluation and assessment of student performance; (5) development of the individualized educational programs; (6) provision of relevant, evidence-based interventions; (7) documentation of services to meet the requirements multiple regulations; (8) support of administration of physical therapy services; and (9) utilization of research data in decision making. Based on the qualities described above, school physical therapists possess a unique skill set that can be of great benefit to students and staff within the school system.

The Physical Therapy Evaluation

In determining a student's need for special education and its related services, a comprehensive physical therapy evaluation may be beneficial to that child's educational decision making A standardized measure, either norm referenced or criterion referenced, is often administered to document the student's level of performance, to determine presence of disability, or to monitor progress). The physical therapist uses professional judgment to select the most appropriate standardized measure and is guided by the characteristics of the individual student, such as age and primary area of disability

To supplement the data obtained from standardized measures, ecological or naturalistic observations of the student participating in the classroom or other school environments are recommended Naturalistic observations in school settings focus assessment on the tasks needed to function during the school day and the skills required to perform these tasks. Analysis of a student's performance of the task can be documented with attention to level of assistance needed (if any), time required to complete the task, prompts required, and any adaptions or assistive devices utilized. Assessment of the effect of the cognitive, behavioral, or physical demands of the task and the surrounding environment on task performance is an integral component of these naturalistic observations. Data gathered from this type of assessment may guide further assessment needs at the body level of the ICF, as well as potential intervention strategies.

Evaluation of the child's body systems functioning is an important component in the determination of potential limitations to school performance. Assessment of the musculoskeletal, neuromuscular, cardiopulmonary, and integumentary systems should be done from the perspective of school functioning. Dysfunction or impairments in these body systems may explain why the student is having difficulty performing school tasks. To clarify the problems that interfere with a student's access and participation in school activities and to identify strengths that may be used to improve the student's performance, the school-based physical therapist may conduct interviews with teachers, parents, and students. Information from these interviews can help identify particular school tasks or task component(s) that are difficult for the child. Other important data to collect are the student's strengths, interests, motivation, and performance in other settings such as the home or community, as well as other strategies used currently or in the past and their effectiveness in addressing the performance issue. Checklists or referral guides may be used to collect this information from school personnel in an efficient manner.

Once the school-based therapist uses the data gathered to make clinical judgments, this assessment is shared with the school team. Some of the first considerations are determining the priorities of the student, teacher, and parent and the student's strengths and needs in relationship to the functional and participation requirements of the school.which of all the assessment findings are key to improved school performance is another consideration as examination data is synthesized. Key components to improve performance may relate to a disability of the student, the complexities of the task, and/or the environment in which the school task is performed. Knowledge of human development and the influence and stability of the student's condition are part of the unique knowledge that physical therapists add to the educational team. This knowledge can be used to analyze current performance issues but also consider future educational performance needs at different grade levels and life requirements after high school). As a member of an educational team, the physical therapist contributes his or her perspective on the student's performance issue and works collaboratively with other team members to develop educational programming to improve educational outcomes.

Physical Therapy Intervention

Physical therapists working in schools provide services to support student engagement in their educational program. All physical therapists use interventions to maximize an individual's functional independence and participation in life roles regardless of age or disease processes and the physical therapy profession emphasize the use of evidence-based practices (EBP) in all aspects of physical therapy services. EBP is defined as clinical

decision making based on the integration of research evidence, clinical expertise, and patient values. While there are many individual research articles related to pediatric physical therapy, most provide limited evidence regarding the effectiveness of interventions.

School-based physical therapists typically use a variety of interventions to maximize the potential of each student. These interventions may address one or more component of the ICF model. Hashimoto and McCoy (2009) developed and validated the Pediatric Physical Therapy Intervention Activity (PPTIA) data form to describe the interventions and activities used by all physical therapists treating children with developmental disabilities. The PPTIA collects data regarding the: (1) types of functional activities addressed, (2) specific procedural interventions used to address the functional activities, (3) amount of time spent on each functional activity during a single treatment session, (4) service delivery model, and (5) intervention setting.

It is anticipated that the comprehensive data collected by the PPTIA will lead to a data bank that can be utilized in practice-based evidence (PBE) research.PBE is an observational research method that incorporates significant aspects of the care processes, including key client characteristics, treatment and care processes, and outcomes. By categorizing the collected data, researchers will be able to uncover relationships between the care provided and the resultant outcomes. This observational approach has the ability to uncover best practices that can later be studied using validation or randomized control studies.