

Chapter 1 : What is Inclusion? An Introduction from Special Education Guide

TGFU 3 1 The Inclusion of Optimal Challenge in Teaching Games for Understanding 2 The area of physical education is rich in ideas pertaining to pedagogical principles and 3 theoretical models that are intended to improve the quality of teaching practices.

WEAC represents K public school teachers and education support professionals, as well as faculty and support staff in the Wisconsin Technical College System, retired members, and university students studying to become educators. Visit our Home Page at www.wisconsinweac.org. Inclusion remains a controversial concept in education because it relates to educational and social values, as well as to our sense of individual worth. Any discussion about inclusion should address several important questions: Do we value all children equally? There are advocates on both sides of the issue. James Kauffman of the University of Virginia views inclusion as a policy driven by an unrealistic expectation that money will be saved. Furthermore, he argues that trying to force all students into the inclusion mold is just as coercive and discriminatory as trying to force all students into the mold of a special education class or residential institution. Between the two extremes are large groups of educators and parents who are confused by the concept itself. They wonder whether inclusion is legally required and wonder what is best for children. They also question what it is that schools and school personnel must do to meet the needs of children with disabilities. While recognizing that there are no simple answers, this paper attempts to give an overview of the concept of inclusion and offers a set of recommendations that can help to ensure that we meet the needs of all students.

Definitions In order to discuss the concept of inclusion, it is first necessary to have a common vocabulary. The following have been edited for clarity. This concept is closely linked to traditional forms of special education service delivery. Inclusion is a term which expresses commitment to educate each child, to the maximum extent appropriate, in the school and classroom he or she would otherwise attend. It involves bringing the support services to the child rather than moving the child to the services and requires only that the child will benefit from being in the class rather than having to keep up with the other students. Proponents of inclusion generally favor newer forms of education service delivery. All services must be taken to the child in that setting. In addition to problems related to definition, it also should be understood that there often is a philosophical or conceptual distinction made between mainstreaming and inclusion. In contrast, those who support inclusion believe that the child always should begin in the regular environment and be removed only when appropriate services cannot be provided in the regular classroom.

Does Federal Law Require Inclusion? Two federal laws govern education of children with disabilities. Neither requires inclusion, but both require that a significant effort be made to find an inclusive placement. However, IDEA recognizes that it is not appropriate to place all children in the regular education classroom. In developing the Individual Education Program IEP for a child with disabilities, the IDEA requires the IEP team to consider placement in the regular education classroom as the starting point in determining the appropriate placement for the child. The purpose of these requirements is to carry out the intent of the IDEA, which is to educate as many students with disabilities as possible in the regular education classroom, while still meeting their unique, individual needs. Section of the Rehabilitation Act of 1973 requires that a recipient of federal funds provide for the education of each qualified handicapped person in its jurisdiction with persons who are not handicapped to the maximum extent appropriate to the needs of the handicapped person. A recipient is required to place a handicapped child in the regular educational environment unless it is demonstrated by the recipient that the education in the regular environment with the use of supplementary aides and services cannot be achieved satisfactorily. Because the categories of disabilities covered by the IDEA have expanded during the past two reauthorizations in 1991 and 1994, Section 104(d)(1)(A) is less frequently used to obtain access to public education for students with disabilities. Court decisions provide guidelines governing placement under IDEA. Even after several reauthorizations of IDEA, most recently in 1997, federal law leaves several questions unanswered, including three significant ones: How far must schools go? What are the rights of the other children? Guidelines established by the following federal court decisions provide school districts with some measure of what is expected of them in determining the appropriate placement for children with disabilities.

Please note that each court has a separate jurisdiction and that the decision may not apply to all locations. However, these cases have been cited by courts throughout the country in cases involving challenges to placement of students in the least restrictive environment. Rome City School District 11th Circuit Court, In this case, the court decided in favor of parents who objected to the placement of their daughter in a self-contained special education classroom. Specifically, the court said: The regular education classroom with no supplementary aids and services; The regular classroom with some speech therapy only; The self-contained special education classroom. The district argued that the costs of providing services in the classroom would be too high. However, the court said that the district cannot refuse to serve a child because of added cost. As in many decisions of this type, no clear determination is made about when costs move from reasonable to excessive. The major message in this case is that all options must be considered before removing a child from the regular classroom. Sacramento City Unified School District vs. Holland 9th Circuit Court, In this case, the circuit court upheld the decision of the lower court in finding for the Holland family. The parents wanted their daughter in the regular classroom full-time. A number of issues were addressed in this decision. The court considered a case in Texas, Daniel R. Non-academic benefits must also be considered. In upholding the lower court decision, the 9th Circuit Court established a four-part balancing test to determine whether a school district is complying with IDEA. The four factors were as follows: The educational benefits of placing the child in a full-time regular education program; The non-academic benefits of such a placement; The effect the child would have on the teacher and other students in the regular classroom; The costs associated with this placement. As a result of applying these factors, the court found in favor of including the child. Board of Education of the Borough of Clementon School District 3rd Circuit Court, In finding for the parents in Oberti, the court ruled in favor of a placement that was more inclusive than that provided by a self-contained placement. Specifically, the court ruled that three factors must be considered: The court should consider whether the district made reasonable efforts to accommodate the child in regular education. The court should consider the effect the inclusion of the child with disabilities might have on the education of other children in the regular education classroom. If, after considering these factors, the court determines that the child cannot be educated satisfactorily in a regular classroom, the court must consider whether the schools have included the child in school programs to the maximum extent appropriate. School District of Wisconsin Dells v. From kindergarten through fourth grade, Z. At age ten, he was placed in a residential facility where he did well. The following school year, attempts were made to return him to the public school setting, but he again was violent, disruptive, and truant. He was placed in a specialized school, but was removed after less than a month. Finally, the District determined after a month without providing services that it would educate the student at his home. There are other court decisions in favor of more restrictive placements, including a decision in the 8th Circuit Court of Appeals that approved a centralized program for a wheelchair-bound student with spina bifida. In this instance, the court decided that school authorities did not have to modify the neighborhood school for wheelchairs when an accessible program was available elsewhere in the school district. Conclusion Courts will carefully examine the facts in individual cases to determine whether school districts have offered an appropriate placement out of a continuum of placements available for every child with disabilities who is enrolled in the district. Courts will examine IEP team processes to ensure that placements are based on the individual needs of each child. Therefore, an accurate comparison between separate programming and inclusive programming cannot be done. The following is a brief review of a number of studies of various inclusive strategies. There are a number of reviews and meta-analyses that consistently report little or no benefit for students when they are placed in special education settings Kavale, K. However, in 50 studies comparing the academic performance of mainstreamed and segregated students with mild handicapping conditions, the mean academic performance of the integrated group was in the 80th percentile, while the segregated students score was in the 50th percentile Weiner R. Using this evidence, inclusion proponents claim that segregated programs are detrimental to students and do not meet the original goals for special education. Recent meta-analyses confirm a small to moderate beneficial effect of inclusion education on the academic and social outcome of special needs students. Another study assessing the effectiveness of inclusion was done at Johns Hopkins University. In a school-wide restructuring program called Success For All, student

achievement was measured. The program itself is a comprehensive effort that involves family support teams, professional development for teachers, reading, tutoring, special reading programs, eight-week reading assessments, and expanded opportunities for pre-school and kindergarten children. In assessing effectiveness, a control group was compared with the students in Success For All programs. Comparisons were made at first, second, and third grades. Students identified with exceptional education needs were included in all comparisons. While assessments showed improved reading performance for all students, the most dramatic improvements occurred among the lowest achievers. There was a similar finding in the comparison of attendance rates. The research also found the best results occurred in schools with the highest level of funding. They concluded that when resources are available to provide supplementary aids, all children do better. The primary importance of research on Success For All is that it demonstrates that with early and continuing intervention nearly all children can be successful in reading. Common practice in compensatory and special education is to identify children who have already fallen behind and provide remediation services that last for years Allington and McGill-Frazen, Research on Success For All and other intensive early intervention programs such as Reading Recovery Pinnell, and Prevention of Learning Disabilities Silver and Hagen, suggests that there are effective alternatives to remedial approaches. While researchers are cautious in their conclusions, there are some positive signs. In particular, students in special education and regular education showed several positive changes, including: A reduced fear of human differences accompanied by increased comfort and awareness Peck et al. The final issue shared by proponents of inclusion relates to cost-effectiveness. Furthermore, the cost of educating students in segregated programs was double that for educating them in integrated programs Piuma, A similar study by Affleck, Madge, Adams, and Lowenbraun demonstrated that the integrated classroom for students with special needs was more cost-effective than the resource program, even though achievement in reading, math and language remained basically the same in the two service delivery models. While in many cases pull-out is supported by the exceptional and regular education teachers and parents, there is mixed evidence of improved academic performance. Most groups and individuals believe that inclusion in the regular classroom is the appropriate starting point, and that a continuum of placement options and services must be available. Successful inclusion practices depend on restructured schools that allow for flexible learning environments, with flexible curricula and instruction. Under ideal conditions, all students work toward the same overall educational outcomes. What differs is the level at which these outcomes are achieved, the additional support that is needed by some students and the degree of emphasis placed on various outcomes. A restructured system that merges special and regular education must also employ practices that focus on high expectations for all and rejects the prescriptive teaching, remedial approach that leads to lower achievement Guess and Thompson, , Heshusius,

We derive Pontryagin's maximum principle for a general optimal control problem using the set-valued version of variational equation. We achieve this aim by exploiting an adequate differential.

The reliable operation of micro grids can be achieved by properly sharing the load demand among available energy sources within the micro grid. The load sharing depends on the type of energy sources and the characteristics of the micro grid where most of these energy sources are based. The grid integration of renewable energy source solar PV system increases the uncertainties as the power generation from renewable energy sources relies heavily on natural sources e. In such cases, load sharing becomes more challenging as the reliability of the grid degrades. A proper load sharing technique is necessary to enhance the reliability and cost of the micro-grid. This study employs the technique of applying simple ratio to divide the load demand among the alternative sources, so as to find the cost of using different combinations of energy sources to power the load was carried out. Via a comparative analysis, the most cost effective means can be determined; three load sharing scenarios are considered for this purpose. Scenario One Figure 2: Daily cost of supply using scenario 1 source combinations The load sharing ratio and the associated cost for scenario 1 is shown in Tables 3 a-c. As shown in Figure 2, the results of the sharing ratio points to combination 2 as being the most cost effective ratio of the energy sources. Combination two is made up of the PHCN grid supplying half of the load demand of the office complex, and the diesel generator providing the other half. Scenario Two Figure 3: Daily cost of supply using scenario 2 source combinations The load sharing ratio and the associated cost for scenario 2 is shown in Table 4 a-c. The results of the sharing ratio in scenario two imply that combination 1 is the most cost effective ratio of the energy sources as shown in Figure 3. Scenario Three Figure 4: Daily cost of supply using scenario 3 source combinations The load sharing ratio and the associated cost for scenario 3 is shown in Table 5 a-c. From scenario three, it is observed that the most cost effective energy source by simple ratio is combination 2 as shown in Figure 4. This combination comprises of half of the energy demand of the office complex being supplied by the grid and the remaining half of the energy is supplied by the solar PV system. Figure 5 shows the cost chart for all the three supply scenarios for the micro grid. Finally, the next cost effective source combination is scenario one combination two, in which the diesel generator and the PHCN grid share the supply of the load demand evenly. This implies that in order of ascending cost: The cost implication of all the supply source combinations for the three scenarios Comparative cost for a single source supply Figure 6: This would have been ideal, but the poor state of the National grid is a major challenge due to constant outages as a result of very low power generation and distribution capacity. This would mean combination 2, 3, 4 from scenario one, combination 3 from scenario two and combinations 2 and 3 from scenario three as shown in Figure 7. The reality is that dependence is on fossil fuel powered generators for needed energy. During the day, smoke from various generator exhausts can be seen rising to the sky at many commercial areas, and in the evening, the use of generators coupled with the smoke and engine noise becomes predominant in the residential areas. The energy cost with diesel generator and solar PV supplying at least a portion of the load In this analysis, supply combinations when the diesel generator supplies a portion of the load and the solar PV system also supplies at least a portion of the load. The supply source combinations that satisfy this condition are plotted in Figure 8. The result shows that for the two lowest cost supply combinations, there is an increment by order of cost as follows: This is the combination of energy from the diesel generator and solar PV, and the high cost is as a result of the huge capital outlay for setting up a PV system coupled with the recurring maintenance cost, and increasing price of diesel for the diesel generator. From all the cost analysis performed, it is clear that the energy cost is cheapest when sourced from the national PHCN power grid. This cost advantage cannot be fully utilized due to the unreliability and the frequent outages of the PHCN grid. Diesel generator is the common alternative, deployed by most commercial buildings, and from the analysis it offers a good cost advantage over Solar PV system in the short run, due to high setup capital of PV systems. Diesel is a fossil fuel, and like other fossil fuels, the world is gradually running out of supply of non-renewable energy sources. Coupled with this, is the production of greenhouse

gases by the combustion of diesel which depletes the ozone layer and thereby destroying the environment.

Chapter 3 : Modigliani And Miller's Capital Structure Theories

for maximum impact takes planning, coordination, resources, data, and the ongoing involvement of local civic leaders. The Advancing Cities Challenge will provide local leaders that have galvanized their.

Chapter 4 : Approximate Maximum Likelihood Commercial Bank Loan Management Model | Science Public

This inclusion is in the vein of that of the earlier work [13] where a " weak " form of a nonsmooth maximum principle (without the Weierstrass condition) is obtained for standard optimal control.

Chapter 5 : Overgrowth is Now Available for Skyforge on Xbox One - Xbox Wire

Guided Cost Learning loop of a policy optimization. Our inverse optimal control algorithm is most closely related to other previous sample-based methods based on the principle of maximum entropy.

Chapter 6 : Success for all Students in Inclusion Classes

Gray Matter ; The brain's emotional core is a connection of neural centers in and near the temporal lobes that together are called the limbic system. The limbic system is the core of emotional response, stress reactions, and fear patterns. www.nxgvision.com

Chapter 7 : Large Databases for Remote Sensing and GIS.

Modigliani and Miller's Tradeoff Theory of Leverage The tradeoff theory assumes that there are benefits to leverage within a capital structure up until the optimal capital structure is reached.

Chapter 8 : AlphaPilot AI Drone Innovation Challenge | Lockheed Martin

shown to be highest for those with maximum disadvantage. Equally, early neglect has lasting disabling full inclusion of children with disabilities in its school.

Chapter 9 : Special Education Inclusion

of optimal control theory and derive a number of optimal guidance laws of increasing complexity. We also will explore the advantages that such guidance laws have over.