



SPECIAL NEEDS (SPED) STUDENTS AND THE SCIENCE CLASSROOM

Although SPED students comprise 10% of the student body nationally, the statistic dramatically increases to approximately 17-18% of all students attending schools in Massachusetts. (The US Office of Special Education)

“The number of students with disabilities continues to increase at a rate higher than both the general population and school enrollment.” (Office of Special Education Program’s 21st Annual Report to Congress)

Children with special needs offer a particular challenge in today’s classroom, as they encompass a variety of psychological and medical conditions. This challenge is particularly acute for science teachers, whose laboratories are often complicated and require self-direction. Specimen dissection is one such example. As an exercise, specimen dissection may not be the most viable option for children with special needs. There are various alternatives to dissection, which include computer programs, models, and charts that are often more appropriate.

“Alternatives to dissection, are **essential** tools for children with special needs. Many students require structured, clear, hands-on instruction to facilitate their education. Computer dissection programs and color-coded models provide interactivity and immediate feedback which can only enhance their learning,” T. Brodsky, speech and language pathologist.

Computers provide an outstanding educational tool for SPED students.

- “[Students with learning disabilities need] to obtain information utilizing...computers.... [Students should be] free from distractions [and their] space free of unnecessary materials... Techniques such as color coding and highlighting important information on which the student needs to focus is another much needed modification.” Learning Disabilities Association of Illinois 1992
- “For students with behavioral problems, the computer can serve as an effective motivator, provide opportunities for cooperative learning, offer social and leisure time pursuits, and provide students the tools to engage in self-monitoring activities. For students with emotional problems, the computer can facilitate self-expression, assist in determining effective learning strategies, and build self-esteem” Fitzgerald in Using The Computer With Students With Emotional And Behavioral Disorders: Technology & Disability

ESEC is committed to finding the best possible educational tools for students, including those with special needs. As the number of special education students and the subsequent burden on teachers increases, ESEC can provide support and numerous resources to students with special needs. We welcome requests for information and encourage borrowing of our various alternatives, which include models, CD-ROMs, charts, and other materials.

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