

Chapter 14

Ecological Perspectives Surrounding the Design of Self-Determination-Enhanced Problem-Based Learning as a Formative Intervention for Students with Disabilities in Inclusive Settings

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ABSTRACT

This transdisciplinary chapter focuses on ecological perspectives surrounding the design of self-determination-enhanced Problem-Based Learning (PBL). The chapter presents a PBL conceptual framework that can be leveraged in implementation of the skills needed for the 21st-century, specifically self-determination for students with disabilities in inclusive settings. The framework is built upon an extensive research synthesis of the principles behind PBL instructional design with an emphasis on special education. The research synthesis revealed the relationships between self-determination learning and PBL. A collaborative learning model—SHARE: Structure, Hypothesis, Analysis, Research, and Evaluation—was subsequently designed as a positive intervention in implementing PBL. In brief, technology and teacher education constitute the essence of quality self-determination-enhanced PBL practices. Educators, educational policymakers, and researchers involved in inclusive education practices will find this chapter of particular interest as 21st-century learning skills are becoming increasingly vital in today's society.

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INTRODUCTION

Estimates show that over 9% of students ages 6 to 21 in the U.S. were placed in special education between 2003 and 2004 (Turnbull, Turnbull, & Wehmeyer, 2007; U.S. Department of Education, n.d.). These students were classified as follows: learning disabilities (47.4%), speech or language impairments (18.7%), intellectual disabilities (9.6%), emotional disturbance (8.0%), multiple disabilities (2.2%), hearing impairments (1.2%), orthopedic impairments (1.1%), other health impairments (7.5%), autism (2.3%), visual impairments (0.43%), traumatic brain injury (0.37%), developmental delay (1.09%), and deaf-blindness (0.03%; U.S. Department of Education, n.d.).

Today, most students with these disabilities are placed in inclusive settings in keeping with the mandates of the No Child Left Behind Act (Lenz & Deshler, 2004; U.S. Department of Education, 2002) and the Individuals with Disabilities Education Act (IDEA; Turnbull, Turnbull, & Wehmeyer, 2007; Vaughn, Bos, & Schumm, 2007). However, the placement of students with diverse abilities in inclusive classrooms poses challenges to general and special education teachers as well as students with disabilities (Lambe, 2007).

The idea behind inclusion is fundamentally simple: inclusion is based on the premise that all children (with and without disabilities) should be allowed to learn together in the general classroom. Despite its simple premise and the apparent benefits and fairness of this principle, its practice creates a number of challenges for students with disabilities, whose special needs often require both support and accommodations if they are to succeed along with their peers without disabilities in the general education setting.

Unfortunately, specific curricula or learning models have not been developed for students with disabilities in inclusive settings. The practice of inclusion has altered how teachers, schools, and educational systems think about the needs of stu-

dents, including prompting educators to reexamine their pedagogy and the instructional design of their learning content to meet the needs of students with special needs in their classrooms. To be successfully implemented, inclusion requires a community that offers collective assistance from students, families, educators, and community members (Wood, 2006). Examples of community support include positive behavioral supports, assistive technology, individualized instruction for both individuals and groups, and collaboration and communication. When part of instructional strategies, these supports yield positive results, including effective transitions between settings, as well as positive behavior, and social and academic outcomes (Bryant, Smith, & Bryant, 2008; Salend, 2005).

To date, numerous studies have explored inclusive pedagogy and instructional practices such as inclusion, legal issues, and Universal Design for Learning (Rose & Meyer, 2002; Sailor & Skrtic, 2009; Wood, 2006). However, little attention has been paid to how advanced learning skills, such as 21st-century skills, can best be taught to all students in inclusive settings, in particular, students with disabilities, for whom these critical skills pose special challenges.

The Partnership for 21st-Century Skills (2004) and Ravitz (2008) named the following as 21st-century skills:

1. Creativity and innovation;
2. Critical thinking and problem-solving;
3. Communication and collaboration;
4. Information literacy;
5. Media literacy;
6. Information, communication, and technology literacy;
7. Flexibility and adaptability;
8. Initiative and self-direction;
9. Social and cross-cultural skills;
10. Productivity and accountability; and
11. Leadership and responsibility.

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