

A Commentary on Personal Thoughts on Early Childhood Special Education Research

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Abstract

Strain provides his perspective on four issues facing science and practice in early childhood and special education. He points to the need for (a) long-term functional research, (b) greater emphasis on the use of evidence-based programs in practice, (c) moving special education research back to the Office of Special Education Programs, and (d) research that focuses on individuals and “honor[s] the idiosyncratic needs of an ever more diverse population of families and learners.” Comments are provided regarding each of these perspectives.

Keywords

child development, disabilities and development delays, implementation, research methods

Introduction

Strain (this issue) provides his perspective on four issues facing science and practice in early childhood and special education. He points to the need for (a) long-term functional research, (b) greater emphasis on the use of evidence-based programs in practice, (c) moving special education research back to the Office of Special Education Programs (OSEP), and (d) research that focuses on individuals and “honor[s] the idiosyncratic needs of an ever more diverse population of families and learners.”

My comments on each of these issues are based on many years of applied research and applied work in a variety of human service systems. I was a codirector of the team that developed the Teaching-Family Model, an early example of an evidence-based program that has been replicated in sites in North America, has sustained with fidelity and good outcomes, and celebrated its 50th anniversary in 2017 (Fixsen & Blase, in press). I am a member of groups that are developing implementation practice and science as a professional discipline in the United States and globally. I am a founder of the National Implementation Research Network that works extensively in early childhood and special education with a focus on implementation factors.

First, Strain’s reference to the “Good Ole Days” is not a call for a return to some idyllic time. It is a call for relevance. Since the advent of the “evidence-based movement” in the 1990s, the focus has been on rigorous research in the form of randomized controlled trials (RCTs), the hypothesized “gold standard” for research. The hypothesis has been thoroughly tested and, unfortunately, the emphasis on rigor has not led to anticipated improvements in teaching or

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student learning. As scientists, we must accept the outcome that RCTs are not the “silver bullet” for solving problems in education or the rest of human services. What is lacking is a mission-driven focus on solving problems in education—the relevance discussed by Strain. Group designs generally are a poor fit with the problems faced by educators. RCTs in particular are too cumbersome, too expensive, and take too long to produce results that are too fine grained to fit the messy world of education. Within-subject designs, especially multiple baseline designs (aka stepped wedge designs), are a better fit. These research designs can be conducted in classrooms and, in just a few weeks or months (not years), produce evidence of functional relationships between independent and dependent variables. If functional relationships cannot be demonstrated with just a few teachers or students, an expensive and time-consuming RCT is not warranted. If functional relationships are found and replicated, a group design could be conducted to establish the statistical relationships among functionally related variables. An example is the Good Behavior Game in which functional relationships with improved student behavior were established in 58 days of data collection using within-subject designs (Barrish, Saunders, & Wolf, 1969). Later, RCTs (Kellam, Rebok, Ialongo, & Mayer, 1994) were conducted to verify and extend the data in support of the intervention. Our own experiences developing the Teaching-Family Model (Fixsen, Schultes, & Blase, 2016; Phillips, Phillips, Fixsen, & Wolf, 1971) are an example of Strain’s admonition to study interventions across decades to better understand the “active ingredients” and produce replications that have social significance.

Second, Strain’s call to direct our research efforts toward the widespread implementation of evidence-based practices (EBPs) is widely supported. As the evidence-based program movement (Roberts & Hinton-Nelson, 1996; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996) has expanded over the past 20 years, it has produced a growing research-to-practice gap (Manna, 2008; National Center for Education Statistics, 2013). To rectify this problem, Kessler and Glasgow (2011) called for a federal moratorium on RCTs and recommended using the funds to advance implementation science. Their point, and Strain’s, is that there is no point in wasting funds to develop more evidence-based programs that will not be used in practice.

Third, Strain says, “if we are to obliterate the gulf between what we know to be efficacious practices and everyday practices we will not get there with status quo research.” The Institute of Education Sciences (IES), the major funding source for research in education, focuses on RCTs and linear approaches (Phase I-Phase IV) to solving problems in education. The results are in: education is not improving as we had hoped. As Einstein said, “Insanity is doing the same thing over and over again and expecting different results.” It is time to change how research is done. Gertner (2012) recounted the dramatic contributions of Bell Labs since the 1920s, revolutionizing communications and setting the stage for the digital age in which we are living. Bell Labs epitomized mission-driven research that promoted the interaction between applied science and basic science, and the interface among many disciplines. The goal was to create solutions for real problems and to pave the way for imagined ways of communicating in the future. Strain’s suggestion to move research funding back into the OSEP would be a step in this direction. Mission-driven applied research directed at solving real problems and putting those solutions into practice would set the agenda. “Relevance, relevance, rigor” would replace the “rigor mortis” (Swartz, 2007) currently contributing to the research-to-practice gap.

In 2006, OSEP was the first federal agency to recognize the potential benefits of implementation science for improving student outcomes. Since 2006, OSEP has included implementation science in various approaches intended to improve services to and outcomes for students with disabilities (Fixsen, Blase, Metz, & Van Dyke, 2013). In 2012, OSEP announced its approach to Results Driven Accountability that intends to change the relationship between a federal agency and state education systems. The new relationship being initiated by OSEP is to turn compliance into support. By taking advantage of implementation science, OSEP is determined to close the research-to-practice gap to benefit children and students with disabilities. By moving IES

research back into OSEP, OSEP soon would be the mission-driven leader in developing usable interventions and the leader in advancing implementation science to assure the full and effective use of innovations in education.

Fourth, Strain pleads for “fidelity to our values” where students with disabilities are treated as individuals with effective supports tailored to the unique combination of strengths and needs of each child. Years ago, Green (1980) dissected the American education system and pointed to the conflicting goals of society and parents. Society funds education so every child will be able to meet minimum standards for participation in society and work. On the contrary, parents want the best possible education for their children. As it turns out, neither goal has been achieved. The National Assessment of Education Progress data show little change from 1971 to present (National Center for Education Statistics, 2013) for students in general education. In addition, students with special needs are no better off (Manna, 2008). The lack of improvement comes in spite of decades of national, state, and local reforms and initiatives. Green introduced the idea of decreasing benefits and increasing liabilities. For example, high school diplomas did not add much to income when most people did not have one in 1939. By 1975, a diploma added slightly more income as high school graduation became common. The bigger effect was the substantial decline in income of those who did *not* have a diploma (see Green, 1980, p. 188, for unique data related to this point). One can only imagine the extent of declining benefits in modern society where college degrees are common.

These data indicate that the lack of effective education is especially damaging for students with disabilities who are less likely to graduate from high school or receive college degrees. Thus, as Strain insists, it is incumbent on educators and researchers to develop and use effective and individualized education for students with disabilities.

Conclusion

Strain has made the case eloquently and convincingly: The overreliance on RCTs and linear approaches to improving education has not produced the hoped-for results. It is time to return to mission-driven and relevant research that is designed to enhance the ability of every child and student who faces challenges to learning. And, it is time to establish implementation supports as a standard part of every state education system so that effective approaches to education are used as intended and with good results. The Good Ole Days have lessons for creating a better future that is within our reach.

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