#### **Executive Summary**

#### How Have Trends in Education Research Evolved over the Past 50 Years?

History is who we are and why we are the way we are.

David McCullough, American Historian

Education as a professional field and academic discipline has historically evolved and responded to social, economic, and technological changes. This book provides the first comprehensive analysis of research trends in education spanning from 1970 to 2020. In this undertaking, we have divided our treatment into four major subdisciplines of education research:

- teaching and teacher education,
- educational technology,
- educational psychology, and
- <u>higher education</u>.

# **Teaching and Teacher Education** >

The past 50 years have seen major changes both in teaching and teacher education. Beginning in 1970, education research dove into understanding what makes a quality teacher, how a teacher's training affects student performance, and what measures are effective in

evaluating teachers. Continuing into the 1980s, teacher education reform and teacher efficacy dominated education research. Teaching English as a Second Language (ESL) also emerged as a prominent theme in the 1980s, and this theme would influence later research on cultural and social awareness in classrooms. As social awareness increased, education research in the 1990s saw an increase in both female and international authors, as well as articles published focusing on students' race, ethnicity, home, and community. Continual improvement in teacher education has been a major theme in education research over the past 50 years, and researchers in the 1990s discussed strategies to help improve teacher education. Along with improving teacher education, research also focused on socioeconomic and language learning factors that impacted student success. In the 2000s, new research centered on the creation of a teacher's professional identity as researchers continued to redefine quality in teacher education. Research in the 2010s predominantly focused on teacher education, with an emphasis on moving away from industrial models of education toward developing quality programs in universities that would better prepare future teachers and avoid teacher attrition. Technology was also heavily introduced into teacher education research in the 2010s as students and teachers navigated technology both in and out of the classroom. In current research from 2020, technology, online learning, and race were the most common themes, reflecting concerns that arose from a global pandemic and an increased awareness of racism, along with efforts to promote antiracism in classrooms and communities. As a whole, the past 50 years of education research in teaching and teacher education have shown a significant shift from standard-based achievement in education to a focus on education that acknowledges barriers to student achievement and trains teachers to work with students to overcome those barriers.

## Educational Technology >

Research on educational technology from 1970 to 2020 experienced a shift from being centered on theories about the effectiveness of technology adaptation to understanding how emerging technologies could be adapted for classroom use. Research in the 1970s and 1980s focused on whether or not emerging technology—like television and other visual media—could enhance cognitive behavior. Strong debates ensued as researchers began to study the intersection of technology, education, and psychology; researchers became more accepting of multiple learning theories, and technology in the classroom began to transition from a theory to an applied learning model. The 1990s brought drastic advancements in technology, including the internet and personal devices, and the research done in this decade laid the groundwork for much of the widespread application of technology in education in the 21st century. Starting in the 2000s, the next 20 years of research branched into multiple new applications for educational technology. A combination of rapidly increasing technological progress and greater access to technology allowed learning models like e-learning, blended learning, gamification, and mobile learning to emerge. Increased access to technology through the 2010s meant a shift in the focus of education research from technology related to student achievement to a focus on technology that fosters positive student interaction and relationships. Research over the past 50 years narrowed from a broad discussion of theoretical applications of technology to emphases on more context-aware and specific technology applications.

## **Educational Psychology** >

Themes in educational psychology research have been consistent from 1970-2020. Many of the articles published throughout these decades dove into the intersection of schema, knowledge, motivation, and selfefficacy. Beginning in the 1970s, research in educational psychology sought to understand which factors influenced student achievement and how learning can be more effective. This decade initiated the next 50 years of research on student motivation. The 1980s brought research on self-concept in learners, along with self-efficacy and selfregulation. Much of the research surrounding this decade and the following decades strove to understand which extrinsic and intrinsic factors influenced students to achieve learning goals. Researchers in the 1990s continued to study these common themes from previous decades, with an emphasis on how much control learners have over their learning, as well as the introduction of the idea of cognitive load. During this decade, researchers discussed theories and practices that could reduce the cognitive load on students, while also increasing cognitive development. Another emerging theme in this decade was the focus on counseling relationships, specifically teacher-student relationships. Measuring student motivation and cognitive load were significant aspects of research done in the 2000s. New theories and ways of understanding, like Problem-Based Learning (PBL), were proposed for classroom use. Another theme from this decade was the need for continued research on student emotions and improving research constructs. Moving into the 2010s, research focused on student learning outcomes and improving statistical processes in research and instructional technology. Cognitive load and motivation remained themes in this decade as well. Research in the 2010s considered the influence of new technologies, theories, and teaching and learning methods on student success and failure, while also trying to understand which traditional methods were no longer effective for students' academic achievement. In 2020, research branched into

specific discussions of common themes from the previous decades. Self-efficacy was studied with the intersection of effort and self-regulation. Cognitive load was also studied, now with an emphasis on how distractions added to that load. Research on motivation studied theories about what influences students' goals and self-evaluations. The topics of student learning and which factors influence successful learning, like peer interaction, technology, and journaling, were also researched in 2020. While much of the research in educational psychology from 1970–2020 overlapped, the articles built on one another with each passing decade, creating a deeper understanding of the intrinsic and extrinsic factors that influence students.

### **Higher Education** >

Over the past five decades, higher education has shifted its focus from teacher-centered research to student-centered research. This has encouraged more thorough student engagement and more comprehensive learning. In the 1970s, learning environments, study processes, student ratings, and freshman attrition were all heavily studied. Researchers sought to understand the factors that kept university students from staying and succeeding in universities. The articles from this decade began the discussion on student-centered learning and initiated the shift in focus from teacher-centered research. This shifting trend continued throughout the following decades, with the main foci in the 1980s being teacher effectiveness. attrition (especially in nontraditional students), and students' selfassessments. With the shift to student-centered approaches also came a shift from behaviorist to cognitivist methods. Research in the 1990s studied the integration of student-centered instructional design approaches, as well as ethnicity and power structures in higher education. Articles centered on the latter topic addressed many of the concerns minority students face in higher education. Themes in the 2000s were heavily influenced by social, political, and economic

factors, with the main topics being student success (specifically, postgraduation), the internationalization of education, and survey response bias. Concerns about the economy continued to significantly influence research in the 2010s as well, with studies emphasizing graduate employability and consumerist education. Student experience was another significant theme in the 2010s, along with the introduction of feminism into education research. Gender equality and its effect on female faculty first became a significant source of study during this decade. Finally, research from 2020 studied partnerships in education, student employability, teaching and learning practices, and online learning. As research became more student-centered during the past 50 years, different theories and perspectives emerged in higher education research. Increased focus on student experience also meant the emergence of research on issues students face, like financial responsibility and racial discrimination. Trends in higher education research have experienced a definitive shift over the past 50 years in response to social, political, and economic factors.

#### **Implications**

As we have explored education research in (1) teaching and teacher education, (2) educational technology, (3) educational psychology and counseling, and (4) higher education, we have seen substantial shifts in education that have prepared educators and students to meet current social and educational challenges. Advancements in technological and pedagogical approaches in education have prepared teachers and students for online learning in the digital age. Similarly, a better understanding of student engagement, motivation, and teacher involvement has focused on providing more inclusive and accessible educational experiences for all students.





Kimmons, R. & Irvine, J. (2021). 50 Years of Education Research Trends. EdTech Books. https://edtechbooks.org/50\_years