Exploring data from various disciplinary-linked methodologies with many different data types and many different data collection sources is common in multimodal learning analytics research. Such data nowadays include previously unobservable measurements that have the potential to expand our knowledge about student learning. Exploration and manipulation of such data are relevant alongside a complex shift in future education systems fueled by increasingly powerful digital technology that enables Artificial Intelligence (AI). These developments impact research on students with Special Educational Needs (SEN) in primary education. This thesis aims with a multimodal learning analytics approach and radical behaviorist emphasis to relate AI and SEN to educational design and research of primary education. Further, foundational aspects of methodological and scientific approaches are explored in related research fields. Beside in-depth philosophical explorations, three notable knowledge contributions for educational sciences methodological purposes include (a) the empirical study of biometrical understanding of students' stress as related to SEN and learning in primary education classrooms, (b) educational exploration of the management and manipulation of large amounts of data through complex sorting algorithms across databases, and (c) applied AI-related modeling and analysis with networked learning analytics visualizations related to the research of primary education. Potential aspects of the impact of AI on research are discussed, such as vast changes to literature review practices and beneficial aspects of mobile adaptive, behaviorist, and predictive digital technology. Ethical implications are also discussed, such as transparency risks that may contribute to large-scale misinformation and integrity-abusing means of control.