Module 1: Critical Constructivism and Reading Achievement for Students with Learning Disabilities

Jason Sutton

George Mason University

**Critical Constructivism and Reading Achievement for Students with Learning Disabilities**

Per the National Center for Education Statistics (2016), 6.6 million students aged 3-21 were counted as receiving special education services in 2014-2015, which translates to 13 percent of all public-school students. Data shows that 67% of students with disabilities, in the 4th grade, achieve at the lowest level in reading (National Center for Education Statistics, 2016). In addition, 35% of the students receiving special education services have been diagnosed with a specific learning disability (LD) (Lunenburg, 2010; National Center for Education Statistics, 2016). Furthermore, 80% of students diagnosed with LD have been described as having a disability in reading (Lewandowski, Cohen, & Lovett, 2013). Students with LD continue to struggle in reading particularly from the transition from elementary school to middle school. This is because students with LD are required to comprehend their text at a greater level.

With this discrepancy with students with LD and reading achievement, the field of special education research has developed evidence-based practices (EBPs) that can have a significant impact on their reading achievement. Even with EBPs being identified in the last thirty years, EBPs continue to be a struggle as a common practice in the classroom (Cook & Odom, 2013). The struggle of EBPs not being used in the classroom can have a negative impact on reading achievement, to access content material, with students with LD.

To gain a deeper understanding of this phenomenon, I need to use a theoretical approach that will aid in my investigation of why there is a lack of EBPs being used in a secondary classroom setting to support reading for students with LD. Although, constructivism is a viable option to understand this phenomenon, I am confident that critical constructivism will guide me to the heart of the issue. Taylor (1996) describes critical constructivism as a social way of knowing that addresses the socio-cultural context of how knowledge is constructed. I believe that critical constructivism can provide a better justification to study my phenomenon. Using a critical constructivist approach will help me create a better design with the correlation between teachers and students. Critical constructivism can challenge the notion of power with teachers making the decision not to implement EBPs to support students with LD in the classroom. Critical constructivism will allow me to investigate *why* EBPs for reading comprehension are not being used in the classroom. The remainder of this is paper will explore (a) my way of knowing; (b) unpacking the various components that make up critical constructivism and how they relate to learning; and (c) justification on why critical constructivism is the best approach to understand my phenomenon.

My life experiences have shaped my ontological and epistemological perspectives to view life through the lens of constructivism. I define my ontology as constructivism. I believe that individuals construct meaning out of their own experiences. I resonate with the argument of Piaget’s theory of constructivism. He argues that people produce knowledge and form meaning based upon their experiences (Forsnot, 2013). My personal belief is individuals react differently in any given situation. People react from their own understanding of the world, through experiences past and present. In my thinking, it is not feasible to think that there is a traditional way that all people interpret information. My life experiences have helped mold this belief.

In the military and law enforcement, the team concept is drilled in your mind. You are taught to function as a single unit that works together to accomplish a goal. Nonetheless, you are taught to look within your team to understand their strengths and weaknesses. You must have a clear awareness of the people on your team. Awareness meaning, “How do they think? What limitations do they present? What is their mental and physical aptitude, in any terrain, that you might encounter?” This awareness makes you realize that individuals think, learn, and react differently. You can have individuals of the same race, age, have the same amount of training, and they all will react differently in various situations. This experience suggests to me that people receive and interpret information differently.

As a teacher and administrator in public education, you are constantly asking yourself how people learn. Every individual learns differently. It does not matter whether you are a student or an adult. Everybody interprets information differently depending on their experiences. To be an effective educator, you are constantly challenging yourself and others to create various solutions for individuals to comprehend information. You must be able to deliver information and instruction that allows people to make their own connection to the material. You are constantly asking students and teachers to reflect on their thinking and learning practices. Continuously aware of individuals environment and how it impacts their learning. Life experiences have taught me that individuals are unique and interpret the world through their own movie. The components that make up their individual movie will dictate how they will react to their environment. Reflecting on way of knowing, allows me to justify why critical constructivism is the best approach to my phenomenon.

Constructivism stems from the field of cognitive science. It distinguishes itself from traditional cognitive theories in various ways. Cognitive theories think of the mind, as a tool, that makes references and interpretations of the environment. In constructivism, there is a belief that the mind filters information from their environment and produces their own reality (Fosnot, 2013). Constructivism, is fundamentally nonpositivist and opposes both behaviorism and maturationism (Gould, 2005). Even though constructivism does not share the same notion that knowledge is mind-dependent, as cognitive science and behaviorism, it does acknowledge the existence of the real world. Constructivism believe that the real world is developed by our experiences, in which, we create our own interpretations (Fornot & Perry, 2005).

Generally, there have been several theorists that helped construct the ideas within constructivism from Jean Piaget, Maria Montessori, Lev Vygotsky, and Jerome Bruner. I will focus on the thoughts of Jean Piaget who help to lay the foundation for constructivism. John Piaget looked at constructivism within the human perspective (Fosnot & Perry, 2005). Piaget describes constructivism as a theory about *knowing* and *how one* comes to know. Knowing how people make meaning in relation to the interaction between their own experiences and how that influences their ideas (Glasersfeld, 1982). With constructivism, Piaget challenged the thinking of the time that believed that representation of an independent reality could provide an understanding of? knowledge. Constructivism challenged the notion? that knowledge could not be represented by an independent reality, but knowledge has an adaptive function. Knowledge is not linear, it is complex and nonlinear in nature (Cobb, 2005). Knowledge could look different because the notion of knowledge is based on an individual experience.

As a researcher, to research my phenomenon, I must think about the construction of knowledge, learning, and how learning correlates with instruction. The idea about knowledge and how one acquires and interprets knowledge is correlated to learning. Individuals create meaning as opposed to attaining meaning. Since meaning is created by individuals from their own experience, true meaning cannot be predetermined. Individuals have built personal interpretations of the world, from their own experiences. Out of their own experiences, these same individuals create their own knowledge (Golinski, 2008). This is how individuals learn. To understand the meaning of learning one must understand the experience of the individual learner. For instance, learning is what we aspire for our students to do in school. Although constructivism is a theory about learning and not teaching, the principles of learning within constructivism, can be used to inform teachers instructional practices (Fosnot & Perry, 2005). Furthermore, in a constructivists approach, it requires that a teacher create an environment that allow students to think and discover, while creating their own experiences. With reading in the content area, the students would have an active role in deciding their literature activities and would be given the ability to try activities of their interest and personal experiences. The classroom would focus on big ideas rather than facts. Students would be encouraged to go at their own pace to create meaningful experiences and reach their own conclusions (Franklin, 2005). The teacher’s guide the students to build concepts, make connections, and problem solve with the literature. Students are taught that multiple perspectives exist, and knowledge is often a matter of interpretation.

This thought made sense to me as a researcher because it reminds me of the connection between student and a teacher. A teacher teaches a student. That teacher tells the student what to know and the students receive the information. There is no real opportunity for the student to experience learning. As researcher I could ask, “How do teachers take into consideration how the individual student interprets, reacts, and reflects on the information from their own experiences?” I would try to understand the dichotomy between how a teacher teaches and how a student learns.

Critical theory is defined as a social theory oriented toward critiquing and changing society, in contrast, to traditional theory oriented only to understand or explain society (Aronowitz, 2015). Critical theory provides the basis for social inquiry aimed at decreasing domination and increasing freedom in all their forms (Palmer, 1993). Critical theory is a tool that can be used to challenge and transform the norms of society. It questions the use of power and who is using the power in what capacity.

Historically, its origins can be contributed to Kant, Hegel, and Marx (Bentley, 2003). It was further developed and defined by Max Horkheimer of the Frankfurt School of sociology in 1937. To address the traditional thinking of the time, Horkheimer, wrote an essay in 1937 to systematically define critical theory (Rush, 2004). In his essay, he questioned the meaning of theory. He defined theory in the traditional sense that it was used as a kind of generalization based upon experience. Horkheimer claimed that the definition of theory could not be conformed to the facts with trying to study society. For instance, society is a fluid organism that has microorganisms within it. These microorganisms are always moving and changing within society, depending upon their experiences. There can never be one way to capture an experience. Each experience must be seen individually. With the fluidity of society, a researcher must be aware that one experience could constantly change. Horkheimer said that all experiences are not the same. These attempted generalizations would make researchers conform to certain ideas and not the experience itself (Rasmussen, 1996). If researchers are developing predetermined answers to an experience, it disrupts progress in society. Horkheimer argued, that the appropriate response, to the generalizations of theory was the development of a critical theory. Horkheimer developed core concepts within critical theory. He believed, that critical theory should be directed at the totality of society in its historical specificity (Bronner, 2013). Critical theory should improve understanding of society by integrating all the major social sciences, including economics, sociology, history, political science, anthropology, and psychology (Forst, 1996). Horkheimer thought that critical theory must meet certain criteria. It must be (a) explanatory: explain what is wrong with current social reality; (b) practical: identify the actors to change it; and, (c) normative: provide both clear norms for criticism and achievable practical goals for social transformation. Horkheimer stated that a critical theory must meet all these criteria is at the same time (Jay, 1996).

Another theorist who continued to add on to the concept of critical theory was Jürgen Habermas. He kept the fundamental approach of critical theory and added the concept of communicative rationality (Habermas, 1984). He stated that dominant culture could use money and power as a mechanism to infiltrate and control lifeworld’s. The dominant culture applies this control by communicating trends in culture. This influence of trends in culture has a direct impact on other lifeworld’s. He conceived communicative action as a fundamental aspect of social praxis (Habermas, 1984).

As a novice researcher, critical theory helps me to understand that I must begin my research with an open mind. There is not a foreseen formula that can address a phenomenon or explain an experience. If we want to continue to add to the story of our field, we must constantly challenge our thinking. If we continually challenge our thinking, this will aid in the betterment of all people with our societal norms and practices. We must be cognizant of the power struggles between society with race, class, and gender, always trying to understand how these power struggles marginalize groups of people.

Critical theory is a means to challenge and reflect on the experiences in society. Constructivism is knowing how people make meaning in relation to the interaction between their own experiences and how that influences their knowledge. Critical constructivism is a combination of two main components of constructivism and critical theory.

Critical constructivism, like constructivism looks at [constructivism](http://edutechwiki.unige.ch/en/Constructivism) within an individual’s response to their social and cultural environment. The critical aspect of critical constructivism looks at reforming the environment that is interacting with the individual to create a better response to their social and cultural environment (Kincheloe, 2005). The Frankfurt School developed critical constructivism. Critical constructivism is concerned with the role power plays in the process of an interaction. Researchers who use it are particularly interested in the way these processes can marginalize one group of people, while providing privilege to another (Aronowitz, 1988).

Critical constructivism seems to be the best theoretical approach to investigate my phenomenon. My phenomenon has to do with questioning the power interaction of teachers and students. Understanding how students personal experience interacts with academic knowledge. Discovering if teachers think they have the right not to implement EBPs in the classroom to support students with LD. Furthermore, as an educational reform and drawing on the influence of the critical theory of Jurgen Habermas and constructivism, critical constructivism makes explicit the interwoven epistemological and ethical strands of teachers' and students' communicative actions (Taylor, Fraser, & Fisher, 1997). Critical constructivism serves as a powerful theoretical framework for making visible and deconstructing repressive cultural myths that distort social roles and discursive practices that can be witnessed in a classroom (Matthews, 2003). This theoretical framework involves engaging participants in the knowledge and research process. To bring it into perspective, the classroom becomes a cultural environment whose social reality is constructed by, the communication between the teacher and students (Watts, Jofili, & Bezerra, 1997). The purpose of critical constructivism is to bring about a greater personal and social consciousness to students and give students the ability to create their own method of learning to foster lifelong learning (Matthews, 2003).

In summary, there is an alarming rate of students with LD continuing to struggle in reading achievement, specifically in secondary education (Kim, Vaughn, Klingner, Woodruff, Reutebuch, & Kouzekanani, 2006). The literature is clear that EBPs should be used to help support students with LD with reading achievement. To date, teachers that work with students with LD are not consistently implementing EBPs for reading comprehension to support their students reading achievement in the classroom. This action does not allow students with LD full access to the content. Consequently, the current teaching instructional model, with knowledge distribution, has been represented by a teacher delivering information to a student from the interpretation of the teacher’s perspective. This study seeks to comprehend from a teacher’s perspective, what would it take, for teachers to incorporate EBPs for reading comprehension into their teaching pedagogy, that would allow students with LD full access to their content. A critical constructivism approach will allow me to structure my research to investigate the current instructional practices of teachers in the classroom in a secondary setting. It will help me to discover and address why there are inconsistencies of teachers not using EBPs for reading comprehension in secondary classroom for students with LD.

Jason – nicely done! Your flow especially when you get to CT comes out very nicely and you are able to capture the nuance and the important issues clearly. There is some clarity that you still need to think about in terms of Constructivism – lots of educators get caught up in the teaching and learning constructivism that sometimes derails the methodological issues –but I think you are in good shape to edit and rework as you move forward. You do have minor typos and things to clear up and be careful in subsequent papers- but overall –not to repeat the comments –this looks good!

Dr. B

28/30

References

Aronowitz, S. (1988). Science as Power: Discourse and Ideology in Modern Society. Minneapolis: MN. University of Minnesota Press.

Aronowitz, S. (2015). Max Horkheimer’s Critical Theory. In: *Against Orthodoxy* (pp. 105-111). New York: NY. Palgrave Macmillan.

Bentley, M. L. (2003). Introducing critical constructivism. In *annual meeting of the American Educational Studies Association, Mexico City, Mexico*.

Cobb, P. (2005). Where is the mind? A coordination of socialcultural and cognitive constructivist perspectives. In: Fosnot, C. T. (Ed), *Constructivism: Theory, perspectives, and practice* (pp. 39-60). New York: NY. Teachers College Press.

Cook, B. G., & Odom, S. L. (2013). Evidence-based practices and implementation science in special education. *Exceptional Children, 79,* 135-144.

Bronner, S. E. (2013). *Of critical theory and its theorists*. New York: NY. Routledge.

Franklin, C. A. (2005). Being there: Middle school students as coconstructors of a classroom senate. In: Fosnot, C. T. (Ed), *Constructivism: Theory, perspectives, and practice* (pp. 246-262). New York: NY. Teachers College Press.

Forst, R. (1996). Justice, reason, and critique: Basic concepts of critical theory. In: Rasmussen, D.M. (Ed), *The handbook of critical theory*. (pp. 138- 165). Malden: MA. Blackwell Publishers Inc.

Fosnot, C. T. (2013). *Constructivism: Theory, perspectives, and practice*. New York: NY. Teachers College Press.

Fosnot, C.T., & Perry, R.S. (2005). Constructivism: A psychological theory of learning. In: Fosnot, C. T. (Ed), *Constructivism: Theory, perspectives, and practice* (pp. 8-38). New York: NY. Teachers College Press.

Glasersfeld, E.V. (1982). An interpretation of Piaget's constructivism. *Revue internationale de philosophie*, 36, 612-635.

Golinski, J. (2008). *Making Natural Knowledge: Constructivism and the History of Science, with a new preface*. Chicago: IL. University of Chicago Press.

Gould, J.S. (2005). A constructivist perspective on teaching and learning in language arts. In: Fosnot, C. T. (Ed), *Constructivism: Theory, perspectives, and practice* (pp. 99-109). New York: NY. Teachers College Press.

Habermas, J. (1984). *The theory of communicative action* (Vol. 2). Boston: MA. Beacon Press Books.

Jay, M. (1996). Urban flights: The institute of social research between frankfurt and new york. In: Rasmussen, D.M. (Ed), *The handbook of critical theory*. (pp. 138- 165). Malden: MA. Blackwell Publishers Inc.

Kim, A. H., Vaughn, S., Klingner, J. K., Woodruff, A. L., Reutebuch, C., & Kouzekanani, K. (2006). Improving the reading comprehension of middle school students with disabilities through computer-assisted collaborative strategic reading. *Remedial and Special Education*, *27*, 235-249. doi:10.1177/07419325060270040401

Kincheloe, J. L. (2005). Critical Constructivism Primer. New York, NY: P. Lang.

Lewanddowski, L., Cohen, J., & Lovett, B.J. (2013). Effects of extended time allotments on reading comprehension performance of college students with and without learning disabilities. *Journal of Psychoeducational Assessments, 31,* 326-336. doi: [10.1177/0734282912462693](https://doi.org/10.1177/0734282912462693)

Lunenburg, F. C. (2010). The principal and the school: What do principals do? *National Forum of Educational Administration and Supervision Journal, 27,* 1-13.

Matthews, W. J. (2003). Constructivism in the classroom: Epistemology, history, and empirical evidence. *Teacher Education Quarterly*, *30*, 51-64.

National Center for Education Statistics (2016). The nations report card: 2016 mathematics and reading assessments (NCES 2016-006). Washington DC: National Center for Educational Statistics.

National Center for Learning Disabilities (2014). The State of Leaning Disabilities, 3rd edition.

Palmer, B. D. (1993). Critical theory, historical materialism, and the ostensible end of Marxism: the poverty of theory revisited. *International Review of Social History*, *38*, 133-162.

Rasmussen, D. M. (1996). Critical theory and philosophy. In: Rasmussen, D.M. (Ed), *The handbook of critical theory*. (pp. 11-38). Malden: MA. Blackwell Publishers Inc.

Rush, F. (Ed.). (2004). *The Cambridge companion to critical theory*. Cambridge University Press.

Taylor, P. C. (1996). Mythmaking and mythbreaking in the mathematics classroom. *Educational studies in Mathematics*, *31*, 151-173.

Taylor, P. C. (1998). Constructivism: value added. *International handbook of science education*, *2*, 1111-1123.

Taylor, P. C., Fraser, B. J., & Fisher, D. L. (1997). Monitoring constructivist classroom learning environments. *International Journal of Educational Research*, *27*, 293-302.

Wadsworth, B. J. (1996). *Piaget's theory of cognitive and affective development: Foundations of constructivism*. Longman Publishing.

Wang, P. (2011). Constructivism and learner autonomy in foreign language teaching and learning: To what extent does theory inform practice. *Theory and Practice in Language Studies*, *1*, 273-277.

Watts, M., Jofili, Z., & Bezerra, R. (1997). A case for critical constructivism and critical thinking in science education. *Research in Science Education*, *27*, 309-322.