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Relevance of constructivists approach to the Ghanaian Early Childhood Education provision.

Maxwell Buabeng

Abstract

Children's early years are considered to be crucial, since this is the time when they learn all of the skills needed to build positive and lasting social interactions. It is believed that learners have previous knowledge and experience, which is often dictated by their social and cultural environment. Various scholars have proposed various theories on how children learn and gain knowledge from their experiences. This paper focused on constructivist philosophy and hypotheses of how children construct their own perceptions. A qualitative study design was used for the review. The research's target stakeholders were nine (9) early childhood education teachers in particular. A structured interview was used to collect data, and the responses were examined in the terms of themes.

Introduction

The start is the most critical part of all. While a good start does not guarantee a good finish, it does, in some ways, guarantee a better future. If the time test is completed, buildings with stable foundational foundations will be elevated to the maximum degree possible without the possibility of eventual demolition. The early years of a child's life are considered to be critical.

It is a period in which children master all of the skills required to establish positive and long-lasting social interactions, and this process continues as they get older. It is believed that students have previous expertise and experience, which is often characterized by their social and cultural environment.

The mechanism of welfare, learning, and health for children up to the age of eight has developed over time into a serious global discussion in pursuit of national policy and local practices that help maintain the right environment for young people's overall growth (Woodhead, 2006).

This increasing global concern for children's physical, mental, cognitive, and social wellbeing is likely to have moved early childhood education to the forefront of constructivism (Ogunyemi, 2015). Several scholars have suggested hypotheses on how children perceive and grow knowledge as a result of their experiences.

The focus of this essay will be on constructivist theory and the assumptions on how children construct their own perception. The researcher assessed the role of constructivist philosophy in the delivery of early childhood education in Ghana, as well as the measures necessary to ensure the effective implementation of constructivist awareness creation. Teachers were interviewed to learn more about constructivism and whether it is used in their classrooms.

RESEARCH OBJECTIVES

The research objectives of the study were;

1. To assess the early childhood teachers' knowledge about constructivism
2. To examine the activities that promote the use of constructivism approach in the early childhood classroom
3. To investigate how early childhood teachers' use constructivism in their classrooms
4. To investigate the challenges that early childhood teachers face with the use of constructivism approach in teaching.

RESEARCH QUESTIONS

The following research questions guided the study.

1. What knowledge do early childhood teachers possess on constructivism?
2. What types of activities promote the use of constructivism in the early childhood classroom?
3. How does early childhood teachers use constructivism in their classrooms?
4. What challenges do early childhood teachers face with the use of constructivism approach in teaching?

REVIEW OF LITERATURE

The theory of learning and development has long been rooted in the schooling of young children through the lens of the Western world. These principles usually explain how young people think about themselves. The idea of how children grow their own consciousness is deeply ingrained in Rousseau's, Pestalozzi's, and Gesell's work.

Later, Piaget refined and reinforced these theories, transforming them into cognitive constructivist learning theory, which is one of the theoretical frameworks underlying early childhood learning curricula (Kamii & Ewing, 1996), as cited in (Asare-Danso & Mumuni, 2016).

Jean Piaget's cognitive constructivist philosophy aimed to include learning environments appropriate for children's ages and levels of growth by allowing them to construct their own understanding. According to Piaget (1948), children construct their own knowledge, understandings, and experiences about the world whenever they are given the ability to communicate with and discover their surroundings. Constructivism is a learning theory that holds that by drawing on our experiences, we can construct our own interpretation of the world we live in. Each of us creates our own set of "laws" and "internal constructs" to help us make sense of our experiences. As a result, learning is essentially the act of modifying our conceptual constructs to fit new experiences. Constructivism can be traced back to Jean Piaget's (1896–1980) work in educational psychology, specifically Piaget's theory of cognitive growth. Piaget was interested in how people make sense in response to the interaction between their perceptions and thoughts. Constructivism is a metaphysical and empirical position that holds that understanding evolves from an active creation method (Mascolol & Fischer, 2005). According to constructivists, information is created by the human by his encounters with his surroundings. Learning is a collective experience that we do together, in connection with one another, rather than an abstract term (Dewey, 1938).

Vygotsky (1978), for example, assumed that culture is important in the process of "making sense." According to Vygotsky, the world in which children grow up affects who and what they care about.

According to John Dewey, all intelligence is built by social relationships (Edwards, 2005; Livingston, 2003). According to Piaget, the infant is regarded as an adventurer or scientist who

explores the universe around him in order to construct his own perception and intellectually organize his world through experience. According to Winsburg and Wilson (1991) as cited in Richardson (2003), the presentation of a subject matter in the classroom is influenced by the teacher's own perception of the subject matter as well as his or her knowledge of how the children are picking it up. The central premise is that all intelligence is invented or "constructed" in people's minds.

Many writers, scholars, and philosophers of education, such as Bruner, Dewey, Eisner, Gardner, Goodlad, Goodman, Graves, David Hawkins, Katz and Chard, Loevinger, Piaget, Inhelder, Slavin, Vygotsky, and others, support these principles and oppose the traditional belief in transmitting knowledge to children in ready-made, well-organized form, in which good teaching is believed to consist of (Brooks and Brooks, 1999).

According to Brooks (1999), Constructivism, or the study of learning, is "about how we all make sense of our environment, and that hasn't changed." Constructivist education is focused on the idea that learning happens as students consciously participate in the process of meaning and knowledge creation rather than passively receiving information. Learners create awareness and meaning. It is important to note that constructivism is not a pedagogy in and of itself. Constructivism is a learning philosophy that describes how people learn. The constructivist philosophy It is advocated that learners create information based on their interactions. Constructivism, on the other hand, is often correlated with pedagogical methods that encourage constructive learning or learning through doing. According to the constructivism learning philosophy, people generate knowledge and form interpretation based on their experiences. Jean Piaget articulated strategies for learners to internalize information. Accommodation and assimilation are two of these processes. When children assimilate, they integrate new perspectives into pre-existing structures without modifying those frameworks. This can happen when people's perceptions fit their internal representations of the universe, but it can also happen when they struggle to alter a faulty perception. Accommodation, according to the definition, is the method of reframing one's internal image of the real universe to reflect new interactions. Accommodation can be understood as the process by which failure contributes to learning: when we act on the assumption that the environment acts in one manner and it contradicts our assumptions, we often fail; but, through accommodating this new understanding and reframing our paradigm of how the world works, we benefit from our own or others' mistakes. Bruner builds on the Socratic practice of learning through conversation, urging the learner to come to

enlighten themselves through reflection (Mills, 2007). Bruner builds on the Socratic principle of learning through dialogue, encouraging the learner to come to enlighten themselves by reflection. Careful program planning is required to ensure that each region improves on the previous one. Learning must thus be a method of exploration in which learners construct their own knowledge with the active dialogue of teachers, building on prior knowledge. Bruner proposed program reform focused on the premise that learning is an engaging, social activity in which children construct new theories or principles based on what they already know.

The central theme of constructivism is that children learn by developing novel theories and concepts and interpreting them by comparing them to previous experience. Children attach value to new concepts, and this method is an example of learning (Hein, 1991). This means that learning is a mechanism in which learners analyze, code, decipher, and interpret new concepts and ideas rather than merely being exposed to new knowledge. Learners choose and transform facts, shape "hypotheses," and rely on cognitive constructs to create and refine their schemas (Kever, 2003; Mos, 2003). Bruner stresses, when broken down, that children perceive their environment by the similarities and disparities in objects and events. As a result, learners equate novel concepts to what they already have and learn from the similarities and variations they discover. The socio-cultural context and situation of a child play a significant role in determining what types of knowledge that individual can understand, as well as shaping the cognitive mechanisms the person uses to construct and use schemas (Kever, 2003).

Constructivists' assumptions on how children construct their own knowledge.

From the point of view of the constructivist teacher who sees education and its attendant curriculum goals as the result of children learning by resolving cognitive conflicts through experiences, reflection, and metacognition, critical thinking is at the heart of the teaching and learning process. Such education has as its purpose, the fostering of looking at events, experiences, assumptions, and conclusions such that the status quo is challenged, alternate and creative solutions to problems are considered, and communication, whether written or spoken, is clear, reasonable, meaningful, and thoughtful. It assumes that all children can think in depth, albeit some more than others, and that it is such thinking that brings about meaningful learning of basic concepts that are applicable and transferable. It further assumes that experiences, direct rather than vicarious, are vital to the critical thinking process and that for young children, only through such experiences and the struggle with discrepancies, oddities, and anomalies does

understanding occur. Such a teacher bases the curriculum and instruction in the classroom around this premise and uses many creative solutions to the diverse ways of learning that children bring to the schooling situation. This presupposes a thoughtful analysis of not only how concepts are uncovered by the child, but also of the physical, emotional, and cognitive environment of the classroom itself. This being so, the constructivist teacher sees critical thinking as the process of interacting within the materials and data of a discipline in such a way as to come to a deeper understanding of the basic ideas that drive the theories of the discipline, create new concepts both within that is transferred to other disciplines and make relevant to one's own life, the concepts of that discipline. It is critical thinking then, that makes radical education a way of life rather than a set of facts to be memorized, retold, and then forgotten after fulfilling a certain prescribed set of steps over a prescribed length of time (Giroux, 1992).

To the constructivists, children ‘construct’ their own meaning by building on their previous knowledge and experience. New ideas and experiences are matched against existing knowledge, and the learner constructs new or adapted rules to make sense of the world. In such an environment, the teacher cannot be in charge of the children's learning, since everyone’s view of reality will be so different and children will come to learning already possessing their own constructs of the world.

Teaching styles based on this approach therefore mark a conscious effort to move from these ‘traditional, objectivist models didactic, memory-oriented transmission models’ (Cannella & Reiff, 1994) to a more student-centred approach.

A common misunderstanding regarding constructivism is that instructors should never tell children anything directly but, instead, they should always allow them to construct knowledge for themselves. This is actually confusing a theory of pedagogy (teaching) with a theory of knowing. Constructivism assumes that all knowledge is constructed from the learner’s previous knowledge, regardless of how one is taught. Thus, even listening to a lecture involves active attempts to construct new knowledge.

The child-centered constructivist approach to early childhood education has its roots in the work of psychologists Lev Vygotsky and Jean Piaget. Piaget's theory on child development, cognition and intelligence worked as a framework to inspire the development of the constructivist approach to learning. The constructivist approach views children as active participants in their own learning. Education is much more than rote memorization; instead, it is integrating and

assimilating knowledge to be further used and explored. Constructivist strategies seek to ignite a child's curiosity and love of learning. Instruction must be concerned with the experiences and contexts that make the student willing and able to learn (readiness). Instruction must be structured so that it can be easily grasped by the student (spiral organization). Instruction should be designed to facilitate extrapolation and or fill in the gaps (going beyond the information given).

Methodology

The study employed qualitative research design. The researcher sought to find out the relevance of constructivism to our Ghanaian early childhood provision. The main goal was to solicit the views of some early childhood teachers about the relevance of constructivism to our early childhood provision. The targeted stakeholders were, specifically, nine (9) teachers of early childhood education. Data was collected through a structured interview. Pseudonyms were used to conceal the real names of the teachers. The data was grouped under topical themes and analyzed for each participant separately.

FINDINGS

Relevance of constructivism to Ghanaian early childhood education provision

The following responses were given by the teachers who were interviewed. The responses, however, have been grouped under themes and presented below.

Teachers' knowledge of constructivism

What knowledge do early childhood teachers possess about constructivism?

Declaration by a teacher;

…I know that constructivism is an approach whereby learners construct their own meaning from their past and current experiences. Yes! I use a constructivism approach in my class. In my teaching period, I put challenging topics for the learners to introduce the lesson. After that, I put

learners into groups and give them a task to accomplish. In working, I assist them to share ideas, compare and contrast, and collaborate to arrive at a solution. The Constructivism approach is very relevant because my learners are able to construct their knowledge which becomes part and parcel of them.

(verbatim statement from Teacher, MSD)

A teacher also added;

…Constructivism is a theory which says that learners depend on their previous experiences to construct their own knowledge through interaction with materials, fellow learners and the teacher. Every learner has something within him or her which he or she builds upon.

(verbatim statement from Teacher, MB)

Activities that promote Constructivism

What types of activities promote the use of constructivism in the early childhood classroom?

Another teacher declared;

You see, when you use a constructivism approach to teach your children, they learn a lot. Because of the nature of activities that constructivism approach demands, children sit in groups to work on a given task while the teacher facilitates. This helps learners to develop the spirit of team work and enhances better understanding of concepts. Learners also become active participants in the learning process "

(verbatim statement from Teacher, RAO)

A teacher also declared;

…Children learn best when they are actively involved in their learning. When learners interact with each other, practically involve themselves in the teaching and learning process, they are able to construct their own knowledge and build upon their previous knowledge.

(verbatim statement from Teacher, SAA)

Constructivism used in the classroom

How do early childhood teachers use constructivism in their classrooms?

Two teachers declared how they use constructivism in their classrooms as follows;

…This is what constructivism is all about: children creating their own knowledge. I use constructivism in my classroom by creating learning centres, also known as four corners, namely; Arts corner, science corner, literacy corner and numeracy corner where learners go there to interact and play with the materials. To me, constructivism is relevant because it helps learners to construct and own their learning.

(verbatim statement from Teacher, TAB)

One more teacher confirmed;

…As for me, I use constructivism in my teaching process by making children sit in a circle to discuss a topic. Each learner brings out his or her views about the topic whilst I, the teacher, act as a facilitator in the process. Yes! Constructivism is very relevant because learners get the opportunity to express themselves and involve themselves actively in their learning. As learners involve themselves in the teaching process through active participation and involvement, they are able to bring out what is in them and also build on it with the assistance of me-the teacher.

(verbatim statement from Teacher, AOM)

The above responses from the teachers seemed to point to the fact that they have knowledge of constructivism and therefore make the effort to implement it in their classroom teaching and learning. It was, however, evident from the responses that there were challenges with the implementation of constructivism in their classrooms since most of the responses were pointed to that direction.

Challenges of Constructivism Approach

What challenges do early childhood teachers face with the use of a constructivism approach in teaching?

The following responses pointed at some prevalent challenges;

…I don't see the true manifestation of constructivism approach or philosophy in our normal Ghanaian traditional classroom. In my classroom, for instance, there is not enough space to even arrange the furniture for children to sit in groups.

(verbatim statement from Teacher, DO-M)

Another teacher declared;

…For children to construct their own knowledge, all learning resources and materials should be made available for them to interact with, and manipulate. But see, in my class, for example, I have to do a lot of improvisations before we can have lessons that someway somehow incorporate constructivism philosophy.

(verbatim statement from Teacher, ITM)

One more teacher confirmed;

…see, our Ghanaian early childhood educational settings are mostly not the ones that are fully furnished with educational resources that support children's learning, growth and development, unlike some of the privately owned ECE centres. A lot of sacrifices and improvisation has to be done to teach children according to the constructivist's approach to learning. How can you teach with a constructivism approach when conditions are not favourable?

(verbatim statement from Teacher, SDE)

Discussion of Relevance of constructivism to Ghanaian early childhood education provision Suggested by respondents

The researcher interviewed nine (9) teachers in total to hear about their viewpoints on constructivism, whether or not they use it in their teaching process, and the importance of constructivism to our Ghanaian early childhood provision. The following responses were addressed from the interviews of the nine (9) teachers: The constructivist approach has allowed children in early childhood education to construct their own awareness based on past and current

experiences. As constructivism philosophy is used in the classroom teaching and learning processes, children are able to construct their own knowledge, which becomes a part of them. This was buttressed by and answer given by a teacher that states, “The primary goal of education is to develop children into responsible individuals who use their intelligence, gifts, and acquired skills to support themselves”. This goal will only be met if children in early childhood education are fully engaged in their learning, allowing them to construct their own information and derive value from their experiences. When children develop their own awareness, it remains with them for the remainder of their lives.

Learners enjoy lessons the most when they are filled with activities that engage them. Play has been the primary practice in which children in early childhood education communicate their feelings, exchange ideas, and engage with one another. Learners develop their listening skills, learn to work with others, and become more sociable. Constructivism mentions play as a significant activity in which children articulate themselves and construct their own learning. This is consistent with Teacher Two's response, which states that as students engage with playful materials at the different centers set up in the classroom, they are able to freely express themselves and construct their own understanding.

Six (6) of the respondents' responses pointed to one direction, while three (3) of the teachers expressed concern that, while constructivism has many advantages for the growth and development of the learning child, unfavorable environments in their classrooms and schools as a whole make the application of the constructivism approach in teaching difficult. Their responses suggest that the importance of constructivism in early childhood education cannot be overstated. If we wish to develop children who can learn to gain knowledge and use that knowledge to help the nation develop in the future, we must pay more attention to the use of constructivism philosophy in the teaching and learning processes in our Ghanaian early childhood provision. In light of this, there are certain steps that, if adopted, would ensure that information production is successfully applied.

Measures to ensure that information growth is implemented effectively

The school environment does not accept constructivism in the modern classroom in a comfortable way. However, educators and parents should use constructivist philosophy to promote a child's learning and development (Lipoff, 2011). Many educators are believed to regard learning as an objectivist philosophy, with the presumption that learning occurs

independently of learners' bodies, existing in books and other instructional records. As a consequence, education is focused on educating the child through manuals rather than through experience. The senses are the primary means of cognition in constructivism, allowing the brain to develop a complete picture of the surrounding environment. This takes us back to the fact that each child is a person, with specific responses and experiences.

According to Lipoff (2011), early childhood educators typically believe that constructivism is a philosophy of how children learn by creating or designing information from within rather than simply internalizing it from their environment. In order to overcome this, the early childhood education instructor should organize lesson exercises that enable children to construct their own awareness by the manipulation of physical artifacts and hands-on interactions.

Children in the constructivist school primarily work in groups to participate in everyday tasks. Communication and social skills, as well as academic cooperation, are emphasized in constructivist teaching approaches. This is in contrast to a typical school, where children often work independently, learning by imitation and lecture. The following activities are promoted in constructivist classrooms:

Experimentation: Children conduct an experiment independently and then meet as a class to analyze the findings.

Children should perform research on a subject and report their results to the class.

Field trips encourage children to apply lessons and ideas taught in class in a real-world environment. Class conversations will often accompany field trips.

Films: They provide another meaning to the learning environment by offering visual context.

Class discussions are included in many of the techniques mentioned above. It is one of the most important differences between constructivist and non-constructivist teaching approaches.

In a constructivist approach to early childhood education, the teacher's position is mainly that of instruction. Teachers only serve as guides to children's learning through promoting exercises and learning experiences rather than prescribing learning goals. When planning a syllabus and curriculum subjects, an early childhood education teacher who believes in constructivism should concentrate on the entire child. The instructor should inspire students to explore and cultivate

their own interests. Curiosity is the catalyst for healthy learning. Instead of a teacher standing in the front of the classroom and dictating facts, educators become collaborators with their students. They inspire kids to ask questions and participate. The early childhood education instructor can have open-ended experiences with various results on a regular basis.

Duckworth (1987) claimed in describing her philosophy of the constructivist classroom that young children must be granted time and the ability to consider critically. The constructivist instructor must not only be accessible to and consider young children's thoughts, but also have an environment in which they can become engrossed in ideas of their own creation. Duckworth claimed that providing children with chances to be intellectually imaginative improves their overall academic capacity. Her notion of struggling to learn is analogous to Dewey's (1991) definition of thought as a means of living in the universe, of being alive. Wonder, excitement, curiosity, puzzlement, and what she refers to as "dawning certainty" (p. 67) are all part of the real effort to make sense of real challenges and their solutions. Duckworth clarified that knowing the correct answer is the most passive of intellectual functions, and she finds it to be intuitive and thoughtless.

Children explore their environments and learn subjects in a constructivist classroom. They play the role of young scientists exploring their surroundings. Children become effective actors of their own education when the teacher opens the classroom to creative learning. As a result, children will be doing their own studying rather than learning from others. They regularly engage in projects and events, deciding how much they want to learn about any particular subject. Children integrate what they have learned into what they already know, resulting in the development of new ideas.

Again, in a constructivist classroom, an early childhood teacher can make time to speak during instructional periods: It is difficult in a packed classroom to address topics needed by state expectations of learning while still meeting school requirements, so shortening lessons, book review, and introducing more engagement and conversation to the lesson is one way to allow each pupil the ability to engage in learning. Incorporating practices that allow students to incorporate prior knowledge and real-world interactions encourages positive learning. A constructive class conversation is still a great way to hash it out, hypothesize novel solutions, and solve problems.

There should be a development in the attempt to direct and assist children in the building of their own awareness. Parents, grandparents, and caregivers are major players that contribute significantly to children's success in any early childhood education environment. In light of this, early childhood education teachers, through the head teacher, can do everything possible to put the need for children to construct their own understanding to the attention of parents, as well as how best they should assist their children in doing so. As a result, it is recommended to parents that, in order to support their children at home, they should take the opportunity to chat about issues and facilitate talks and debates about new and interesting subjects. They can also remember to ask a couple of open-ended questions.

Any early childhood education teacher should understand the principle that "doing is learning." In terms of this principle, the teacher should strive to keep the children out of the classroom as much as possible and use their senses for learning. This also refers to the home environment: For learning and development, look to the great outdoors as well as real-life social experiences. When a teacher brings students out into the working world to put their thoughts and skills to the test, it promotes positive learning and comprehension. After the out-of-classroom experience, the instructor should facilitate a group conversation to finish the lesson. Parents will be encouraged to do the same by going on a short nature walk outside.

Constructivism is about improving the child's senses and perception of the environment around him, not about test scores and rote learning (Lipoff, 2011). The early childhood education instructor should look for opportunities to inspire learning through experiences that have no fixed limitations or outcomes. Allowing a kid to carry out open-ended tasks fosters imagination and self-esteem. For example, if the instructor is discussing weather systems, the students may make a colorful weather collage. When debating architecture, the children will be directed to brainstorm concepts for better covered bridges as a group. Not only is the child's brain growing in incredible ways, but he is also exploring his senses, learning all about his abilities and limitations, and then making improvements.

Conclusion

The foundation for instructional practice is how we interpret knowledge and the method of acquiring it. If we assume that learners passively obtain information, then knowledge transmission will take precedence in instruction. If, on the other hand, we conclude that learners consciously build information in order to make sense of their surroundings, so learning would

most certainly prioritize the production of context and comprehension. Hein (1991) stresses that constructivist concepts, which are becoming highly influential in the organisation of classrooms and curricula in schools, can be extended to classroom instruction. The ideas conform to our new understandings of schooling and expertise, but they contradict conventional learning habits. To apply these concepts to their classes, early childhood education teachers must focus on their practices.

Reference

https://www.funderstanding.com/theory/child-development/constructivism-and-the-developing-child/

https://quora.com> What-is-the-main-aim-of-education?

https://courses.lumenlearning.com> Constructivism and Social Constructivism

Asare-Danso, S. & Mumuni, T. (2016). *Effects of Teachers' Psychological Orientation on Kindergarten Classroom Instructional and Assessment Practices: A Cognitivist / Constructivist Approach*. Vol. 7 No. 1, June 2016, pp. 111-133.

Brooks, J., & Brooks, M. (1993). In search of understanding: The case for constructivist classrooms. Alexandria, VA: ASCD.

Brooks, M. G., & Brooks, J. G. (1999). The courage to be constructivist. *Educational Leadership, 57* (3). Retrieved October 2, 2015 from:

Cannella, G. S., & Reiff, J. C. (1994). Individual constructivist teacher education: Teachers as empowered learners. Teacher Education Quarterly 21(3), 27-38. EJ 498 429

Dewey, J. (1991). How we think. Buffalo, NY: Prometheus Books.

Dewey, J. (1938) *Experience and Education*. New York: Collier Books.

Duckworth, E. (1987). *The having of wonderful ideas*. and other essays on teaching and learning. New York: Teachers College Press, Columbia University.

Education. Ed. P.K. Ojedele, M.O. Arikewuyo and A.C. Njoku. Ondo: Nigeria, National Institute for Educational Planning and Administration.

Edwards, S. (2005). Children's learning and developmental potential: Examining the theoretical informants of early childhood curricula from the educator's perspective. *Early Years*, 25(1), 67-80

Elliott, S.N., Kratochwill, T.R., Littlefield Cook, J. & Travers, J. (2000). *Educational psychology: Effective teaching, effective learning (3rd ed.)*. Boston, MA: McGraw-Hill College.

Ogunyemi, F., T. (2015). *Mushroom private nursery/primary schools*: The bane of qualitative early childhood education.'' Contemporary Issues In Nigeria

Giroux, H. (1992). Border crossings: Cultural workers and the politics of education. New York: Routledge.

Global Monitoring Report 2007, Strong foundations: early childhood care and education, Paris: UNESCO.

Hein, G. E. (1991). Constructivist learning theory. *The Museum The Needs of People.* Lesley College. USA.

Kever, S. (2003). *Constructivist Classroom:* An Internet Hotlist on Constructivist Class. Retrieved 22 January, 2004, from http://www.kn.pacbell.com/wired/fil/pages/listconstrucsa1.html

Lipoff, S. (2011). Constructivism and the Developing Child: Retrieved from https://www.funderstanding.com/

Livingston, D. R. (2003). Reclaiming early childhood teacher education: A critical constructivist approach. *Paper presented at the Annual Meeting of the Southeastern Regional Association of Teacher Educators*, Savannah, GA, 3-21.

Woodhead, M. (2006). Changing Perspectives on Early Childhood: Theory, Research and Policy, Background paper prepared for the Education for All

Mos, L. (2003). Jerome Bruner: Language, Culture, Self. Canadian Psychology, 44(1), 77-83.

Mascolol, M.E. and Fischer, K.W. (2005). Constructivist theories. Theories of Development. available at http://www.academia.edu/8906476/Constructivist_Theories

Mills, J. (2007). Constructivism in Early Childhood Education. *Perspectives In Learning, 8* (2). Retrieved from http://csuepress.columbusstate.edu/pil/vol8/iss2/8

Piaget, J. (1948). *The Moral judgement of the child.* Glencoe: III, Free Press.

Richardson, V. (2003). *Constructivist pedagogy:* Teachers College Record, 105, 1623-1640. doi:10.1046/j.1467-9620.2003.00303.x Teaching Guide for GSIs. Learning: Theory and Research (2016). Retrieved from http://gsi.berkeley.edu/media/Learning.pdf

Teaching Guide for GSIs. Learning: Theory and Research (2016). Retrieved from http://gsi.berkeley.edu/media/Learning.pdf

VonGlasersfeld, E. V. (1974). Piaget and the radical constructivist epistemology. *Epistemology and education*, 1-24.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.