

Piaget and the ESL classroom: Meaning making and language learning

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Summary: This article is a reflection on Piaget's theory of cognitive constructivism and how meaning making is evidenced in the ESL classroom.

Keywords: Piaget, logico-mathematical knowledge, meaning making, ESL classroom, language learning, Vygotsky

"Giraffe!" yelled Joseph.

As a former fourth grade teacher and now an ESL teacher, hearing Joseph's response in my class made me curious. Within the unit on describing different types of movement, I was teaching the word "walk" so why would five-year-old Joseph excitedly exclaim "giraffe!"?

When I taught fourth grade I was dually certified in elementary education and ESL. I was the only general education teacher in the building to have an ESL certificate. Therefore, the emergent multilingual students in fourth grade were placed in my class to ensure they received the most effective instruction to support language learning. Being a general education teacher with an ESL certification gave me a birds-eye view into their language learning journey. As the general

education teacher, I worked closely with the ESL teacher to support our students in and out of the classroom. Through this lens, I noticed some noteworthy connections my students were making that reminded me of what I learned about Piaget throughout my academic journey.

I began learning about Jean Piaget's theories (1973) in my undergraduate program. Last summer I took a graduate class from Dr. Causey. She guided the class through an in-depth study of Piaget. This year as an ESL teacher pursuing a master's in ESL, I took a course in second language acquisition from Dr. Prado. As I worked with multilingual students, I began to experience the connections between Piaget's theory and second language acquisition and wanted to explore that more.

Piaget and Vygotsky: Small Yet Significant Differences in Language Learning

Jean Piaget, renowned French psychologist who researched child development and learning, is best known for his seminal theory of cognitive constructivism which "emphasizes the role each person plays in constructing his or her own knowledge" (Branscombe et al., 2014, p. 9). According to Piaget, learning is an internal process of integrating new knowledge with prior information. Through creating relationships among ideas and objects, the learner constructs their own knowledge (Piaget, 1973). In general, teachers plan for, implement, and facilitate new content and information, and the learner's job is



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to make connections and create their own knowledge through a meaning-making process. How the teacher designs instruction for the children is based on a theoretical perspective. Critical to this lens is Piaget's emphasis on the three types of knowledge and the source of each knowledge:

- **Social knowledge:** the names and conventions of the world around you, such as people's names, holidays, and social etiquette. Social knowledge has a source outside of a person and can change depending on the context of the person, where they live, and their culture. Within social knowledge, Piaget's focus is on the internal cognitive processes that occur to obtain this knowledge.
- **Physical knowledge:** these are facts about the physical world around you. The wall is solid, the light is bright, the cat is soft, the table is black and the source of that knowledge is the physical properties of objects.
- **Logico-mathematical knowledge:** the ability to manipulate social and physical knowledge to create new relationships and meaning and the source of this knowledge is inside the person's brain. For example, you count a row of pencils to find that there are eight pencils. The idea that we call it a pencil is social knowledge. There is a physical pencil that is hard, yellow, and has lead. The eight-ness of the pencils only exists because we connected the number and relationship as a result of building cognitive structures (logico-mathematical knowledge) (Cohen & Stupiansky, 2013).

Lev Vygotsky, a Russian social psychologist, and Piaget have many similarities in their theories of constructivism. Both focus on the role of the learner in the learning process and how they construct new knowledge. Vygotsky is most known for his Zone of Proximal Development (ZPD) and his theories on how the environment and social interaction influence the learner (Sharkins et al., 2017). Vygotsky's theories are widely known in the world of ESL and though the theories of Piaget and Vygotsky complement each other, Piaget is not widely referred to in ESL literature.

Vygotsky's sociocultural and scaffolding theories provide an instructional framework to support learners in acquiring new information through interaction with their environment, their peers, and the adults around them. This is a benefit for emerging multilingual students who need the support through scaffolding and interactions with others to acquire the target language. Though the scaffolding and interaction aspects of L2 acquisition and teaching are essential, it's also



"Waiting in line = queueing" by Lars Plougmann is licensed under Creative Commons

important to note what is happening within the learner, and Piaget addresses this in his theories of constructivism (Sharkins et al., 2017).

Piaget's focus is on how learners make meaning of new content within themselves. The significant differences between the two theories is that Vygotsky focuses on the impact of the external environment on the learning process while Piaget focuses on the internal processes that impact learning. For the purposes of this article, this internal processing can be referred to as "meaning making" as the learner is taking what they already know and internally connecting that knowledge with new information and drawing new conclusions to construct new knowledge. This article addresses the small yet significant differences between Vygotsky's and Piaget's theories and how those differences impact language learning (Sharkins et al., 2017).

The question I wished to explore more fully then was how do emergent multilingual children evidence Piaget's cognitive theory in small group instruction through meaningful connections?

Learning From Children

As an ESL teacher in an elementary school in the southern United States, I teach a small group of multilingual kindergarten students who speak a variety of languages including Spanish, Vietnamese, Thai, and Arabic. Most of my students come from low to middle socioeconomic status and receive free and reduced lunch.

In the process of teaching and observing my students, I noticed that they were making connections about what we were learning to their prior experiences. Examples of this can be seen as Joseph, Kristina, and Brandon (all names are pseudonyms) engaged in different learning experiences.

In a unit learning about action verbs kids are familiar with—walk, run, jump, for example—we practiced each word by defining it, using it in a sentence, and acting it out. I began to walk around the room and I asked, “What am I doing?” Several puzzled faces looked back at me until Joseph yelled “giraffe!” I was initially confused by Joseph’s response until I remembered the image I had used to teach “walk” was an animated picture of a giraffe walking and that Joseph had visited the zoo with his family the weekend before. His mom had told me that giraffes were his favorite animal. What did Joseph reveal about his thinking when he yelled out “giraffe!”?

While practicing identifying the main idea in pictures, I asked my students to recall what “main idea” means. We had been reviewing and practicing all week identifying the main idea in pictures and short stories. After a long pause, in response to my question, Kristina responded, “Waiting in line!” Like with Joseph, my initial response was confusion. Then I remembered that one of the images we practiced with showed people waiting in line. Again, what was Kristina revealing about her thinking?

Lastly, after buzzing around the classroom to practice being a bee, we paused to land in our hives. I asked, “When bees are done buzzing, where do they go home to rest?” And I showed a picture of a beehive and the honeycombs inside. Most of my students yelled out “hive!” in response to the picture of the beehive but I heard one soft voice in the back say, “stop sign.” I looked to see where the voice was, and Brandon raised his hand. I told him how unique his response was and asked him to explain to help me understand. He stood up and pointed to the shapes inside the honeycomb, which to my surprise were in the shape of a stop sign. We had not talked about stop signs, so what was Brandon thinking when he said stop sign instead of honeycomb?

The Work of the Child to Create Meaning

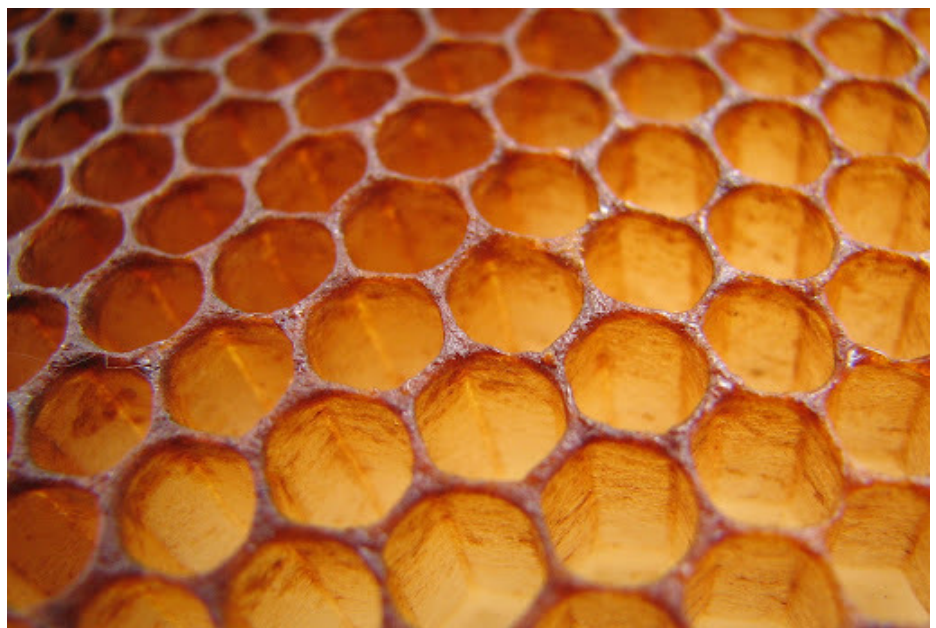
Joseph, Kristina, and Brandon demonstrated making connections between what they already knew and what they were currently learning so they could make meaning of the new learning. They were showing evidence of Piaget’s theory of cognitive development, specifically meaning making, or logico-mathematical knowledge (Cohen & Stupiansky, 2013). The significance, and what differentiates this from Vygotsky’s theories, is they were making their connections internally. For Joseph, he took the explicit teaching of walk and his own knowledge of giraffes and was internally constructing his own understanding about walking. Kristina connected the

main idea and waiting in line while Brandon connected his prior knowledge of stop signs with honeycombs. They were using logico-mathematical thinking to internally manipulate their understandings of walk and giraffe to create new meaning for themselves.

Vygotsky’s theory of social constructivism emphasizes the role the environment plays in meaning making and our classroom activities helped facilitate that connection (Sharkins et al., 2017). While both theories are important to learning, in these examples the emphasis is on the connections the children made internally. This is exactly what Piaget points to in his theory of cognitive development and what distinguishes him from Vygotsky’s theories. The connections the children made seem clearly to have been made internally. It was completely their own because they were connecting their background knowledge with what we were doing in class. The kindergarteners used what they already knew and what they were learning to make new meaning, which is an example of what I was learning from Piaget’s theory of cognitive constructivism (Piaget, 1973).

Conclusion

Though Piaget’s theory of meaning making isn’t often explicitly linked with practices in the ESL classroom, his work shows that it is important for ESL students as they are learning a new language. With this knowledge, I challenge all teachers to look for opportunities to support their emergent multilingual students in connecting what they already know to what they are learning. The seemingly “random” words our students say which may have us scratching our heads are evidence of connections young learners are making internally between what they have experienced and what they are learning in the classroom.



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REFERENCES

- Branscombe, N. A., Burcham, J. G., Castle, K., Surbeck, E., Dorsey, A. G., & Taylor, J. B. (2014). Early childhood curriculum: A constructivist perspective. Routledge.
- Cohen, L. E., & Stupiansky, S. W. (2013). Learning across the early childhood curriculum. Emerald Group Publishing Limited.
- Piaget, J., Roberts, G., & Piaget, J. (1973). To understand is to invent: the future of education. New York, Grossman Publishers.
- Sharkins, K., Newton, A., Causey, C., & Ernest, J. M. (2017). Flipping theory: Ways in which children's experiences in the 21st century classroom can provide insight into the theories of Piaget and Vygotsky. Southeast Asia Early Childhood Journal, 6, 11–18. <https://doi.org/10.37134/saecj.vol6.2.2017>
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Land Acknowledgment

Washington Association for the Education of Speakers of Other Languages (WAESOL) recognizes and honors our many diverse Indigenous and Native Peoples in the Pacific Northwest, in the United States, and globally—past, present, and future. We acknowledge that the arrival of the English language impacted the traditional languages and cultures of the Native, Indigenous, and First Nations Peoples and we celebrate the work to reclaim or maintain their languages and cultures. We stand in solidarity with the Native, Indigenous, and First Nations Peoples and respect their sovereignty, cultural heritage, and lives. May we all take a moment to honor the Indigenous tribes and Indigenous lands that we reside on and pay our deepest respects.

