Module 3. Cognitive Development

Assigned and Additional Readings	Reflection prompt
rteaurigs	For each reading (chapter), describe
	2+ ideas from each chapter of the assigned readings that sparked some kind of reaction in you. Describe the section of the reading, describe your reaction. Be as specific as possible.
Chapter 6: Piaget and Vygotsky	1.) The first concept that struck out to me is the key idea in Piaget's Theory that states that children pull separate experiences together and organize what they learn to formulate a cohesive understanding of how the world operates. This concept highlights that experiences are not understood as unrelated facts. Rather, children use multiple interactions with their environment to initiate behavioral schemes (repeated actions or thoughts) as response to learned encounters. In reading this section, I found myself reflecting on my toddlers experiences and how important it is to be mindful of the information she's exposed to even at a young age. As a parent, I have often been told that she's still young and won't remember a majority of events in her life. However, knowing that even infants develop behavioral schemes puts into perspective that children are always watching and processing the information they are exposed to in their environment.
	2.) Another concept that I found very interesting was the importance of providing opportunities for experimentation and play. In our reading, we are advised to incorporate Piaget's Theory to stimulate natural curiosity and provide opportunities for children to make their own choices. This means allowing children to explore on their own and use play as an active form of learning. As I read through the strategies given to educators in advancing free play for toddlers, I also began to reflect on my tendency to disrupt self-discovery by interfering with free play. Instead of teaching my child to do things "the right way," I will start to encourage her to explore and make mistakes, providing guidance and assistance only when necessary.

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Chapter 7: Cognitive processes	 1.) In learning about cognitive process theories, we learn that short-term memory is considered the working memory, which actively thinks through events and ideas while long-term memory saves information learned from experiences. Short-term memory is said to have limited capacity and offers only a small amount of space while long-term memory has an unlimited capacity, holding in vital information for a person to recover in the future. In thinking about the differences between the two, I began to wonder how much power we have in deciding what is stored long-term and if it is solely triggered by impactful or traumatic events. As someone that habitually engages in self-reflection, I am intrigued by our capacity to retrieve memories from very far back in the past and our potential ability to block and dispose of memories that no longer serve our best interest in the present. 2.) An important key idea presented in the text is how children's motivation, emotions and stress affect their intellectual process. These factors are said to influence thinking, attention and self-control. In conditions where there is extreme stress, children are believed to face hardships in learning to cope and move forward due to the presence of intense stimuli. In reading this information, I began thinking about my experiences as a child and how difficult it was for me to move past small incidents due to excessive fear of consequence. I often found myself trapped in my own head, thinking about the worst case scenario, which affected my ability to focus on my academics. As an adult, I have become better at regulating my emotions and actively solving problems as they arise. My personal experience has taught me that we must strive to overcome our fears to have the ability to perform at our best potential.
Chapter 8: Intelligence	1.) An important concept I came across in this chapter is the need to ensure that a test is not only 'valid' but fair. In the text, we are reminded of how cultural bias can unfairly penalize those from a particular ethnic background, gender or economic status. Thus, it is important that a test is applicable towards diverse groups and does not just seek to meet Western standards. As a previous educator in an at-risk school, I often felt that standardized testing did not cater to the needs of the children I served and was neither fair and appropriate for assessing my students' learning. As a teacher, I hoped for standardized testing to be culturally responsive and attend to the needs of my students who are just learning the English language. Our reading reminds us that intelligence tests must be accommodating and

considerate to ensure an accurate measure of intelligence.

2.) In analyzing significant impacts to intelligence, there is considerable evidence that shows that the environment has a direct influence on intelligence scores due to factors such as nutrition, toxic substances, home environment, early intervention and formal schooling. The child's upbringing is believed to be a significant contributor to the operation and activation of many genes, leading to higher IQ scores for children with parents that stimulate their intellectual skills. Gaining a deeper understanding of factors that affect a child's IQ have put into perspective the need to expose our children to various experiences that can positively demonstrate new models of education. I believe that as parents, we should invest more time in nurturing and enriching our children's educational growth at home instead of solely relying on schooling to guide them.

Chapter 9: Language development

- 1.) In this chapter, B.F. Skinner proposes that children listen intently and repeat sounds after detecting a favorable response from adults. However, it is also understood that children are able to speak many phrases that are neither said or reinforced by the people around them, leaving room to question where native language begins. While nativists link language acquisition to inherited abilities, cognitive theorists believe that language develops through detections of patterns. Additionally, sociocultural theorists highlight the importance of social interaction in language learning while functionalists believe that language motivation is derived from personal needs. After reading about the different frameworks tied with language development, it was clear to me that many perspectives emerge as reasoning for how language develops. I think that what is most critical to keep in mind is that children have high intellectual language capabilities and soak in the information they receive as they go through complex developmental changes.
- 2.) In the text, we learn the advantage of bilingualism and how it builds on interpersonal relationships and gives children access to an ancestral language as well as cultural traditions. Learning a second language is believed to benefit a child intellectually for it strengthens the brain's executive functions such as planning and decision making, which serves as a guide when shifting from one intellectual thought to another. Children who are bilingual benefit from having insight of different expressions and experiences. In learning more about

bilingualism, I grew appreciation of having the ability to both speak and understand two languages (English and Tagalog). I also agree that knowing the native language builds deeper connections within relationships and instills a cultural bond within the group. As a Filipino-American, I am honored that I have retained and continue to use my native language.

Self-Assigned Readings

Reflection prompt

3 or more thoughtful selections related to the ideas in this module. List readings in APA format.

For each reading, describe

- 1. What made you choose this reading? What specifically is it related to in the chapter readings?
- 2. Describe your thoughts after reading it.

Hartshorne, J. K., Tenenbaum, J. B., & Pinker, S. (2018). A critical period for second language acquisition: Evidence from 2/3 million English speakers. Cognition, 177, 263–277. Title: A critical period for second language acquisition: Evidence from 2/3 million English speakers

- 1.) In Chapter 9, we learn that when a second language is learned earlier in life than later, it is retained more quickly. I chose this reading because I am personally driven to know more about language acquisition and peoples' experiences when introducing a second language to a child. I want to learn more about methodologies families have used that have resulted in positive and effective outcomes.
- 2.) After reading the article, I was able to better understand how grammar-learning ability is preserved up until late adolescence where it then begins to decline rapidly. The article also highlights how immersion can help with second-language acquisition. After reading the text, I grew to understand that there is a significant amount of time for children to learn two languages and that it is important to utilize this critical period for intellectual advancement. Although I previously had hesitations that my child would end up confused by rapid shifts in language,I now understand that dual-language instruction can help support both learning of English and the native tongue.

Herbein, E., Golle, J., Tibus, M., Schiefer, J., Trautwein, U., & Zettler, I. (2018). Fostering elementary school children's public speaking skills: A randomized controlled trial. *Learning*

Title: Fostering elementary school children's public speaking skills: A randomized controlled trial.

1.) I chose this article because as an immigrant who came to the U.S. at the age of 10, I personally had a difficult time with public speaking due to being new to speaking the English language. I am curious to know what type of

and Instruction, 55, 158–168.

- strategies can be implemented to help children with similar experiences so that they can confidently acclimate to their new environment.
- 2.) This article describes the impact of enrichment programs in addressing speech anxiety, nonverbal communication and comprehensibility. Findings show that children who participated in speech training improved self-perceived public speaking skills and gained significantly higher scores in verbal intelligence. Children who participated in interventions also improved eye contact, posture, gestures and speech fluency. After reading this article, I realized that children, especially those who are still learning the English language, can benefit greatly from interventions that focus training efforts on public speaking. Through modeling, giving feedback and providing students the opportunity to practice, we can instill lifelong skills to help advance students' public speaking competence

American Psychological Association. (2003, February 1). Intelligence across cultures. *Monitor on Psychology*, 34(2).

Title: Intelligence across cultures

- 1.) While reading about intelligence scores and the potential for cultural bias, I was intrigued and motivated to learn more about 'intelligence' and how it is defined across the globe. As described in our readings, it is important to not unfairly penalize people from different ethnic backgrounds by a series of tests. Therefore, it is important to understand how intelligence is viewed by different cultures.
- 2.) After conducting research in Africa, Asia, and Latin America, it was found that non-Western cultures view intelligence differently than what is defined by Western intelligence tests. While Western cultures use intelligence tests to categorize individuals, Eastern cultures view intelligence as a way to recognize complexity and social roles in the community. Reading this article re-affirmed my belief that we must be culturally sensitive and cognizant of the different viewpoints across the globe for we cannot assume that all cultures hold the same values. I also do not think that we can appropriately use the same standard measure to evaluate intelligence when we were not given the same type of education and resources, nor did we all grow up in the same environment.

Possible discussion topics with the instructor (David Wong)

Describe 2 or more things related to the ideas in this module you want to talk more about with the instructor. Be really specific about the terms or ideas in the readings you are referring to. You can ask questions, offer an opinion, anything that can start our discussion!

- 1.) I would like to discuss how language can be retained if our native language is no longer a common tongue in our home. For example, in my home, Tagalog is rarely spoken in a back and forth conversation since my partner is Colombian and cannot speak my native language. Additionally, my parents, who live in a different city, often speak English instead of Tagalog when they visit.
 - a.) Reflection Question: How can we continue language development if a majority of our family members including ourselves have assimilated and adapted to U.S. practices?
- 2.) I would like to discuss how 'intelligence' is defined around the globe. I think that it is important for us to keep in mind that although we often make comparisons based on U.S. standards, there are other factors that other cultures would consider to be highly achieving. Thus, we must understand what type of knowledge is valued by various cultures before we seek to identify who is highly intelligent.
 - a.) Reflection Question: Is it possible to adapt Western tests to non-Western cultures or should new tests be designed?