

THREE LEARNERS IN THE SAME BOAT

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Abstract

The cognitive competencies that compose the education domains have evolved to allow learners to function in and adapt to the social conditions and the many diversified techniques and strategies meant to adjust and evolve the teaching and learning process. A more central concern in modern society is the EFL students' learning of evolutionarily basic competencies, such as reading, writing, and speaking. Evolutionary educational psychology is the study of the relation between cognitive knowledge as these influence academic learning in evolutionarily educational contexts. One core goal of schools and schooling is to organize the activities of the EFL Learners so that they acquire competencies, such as the ability to practice the target language skills which are important in the wider fields. The paper at hand is a trial experiment conducted with first year EFL learners at the department of English, University of Bejaia. Therefore, the research methodology has been designed according to this situation as most of the first year EFL learners present some kind of shyness, apprehension and frustration in front of the new environment where only English is used mostly in the speaking skill. Based on observation and experimentation techniques and cemented by questionnaires as tools to gather reliable data, we hypothesized that ideas designed by brain experts, who conducted complicated experiments consisting of implementing and involving "Brain Gym" before the lecture is delivered might be a future theory that will promote in class collaborative movement as a learning aid and provide the EFL learners with creativity and self expression. Therefore, in order to conduct this investigation on solid bases, there is a sub- research question which will provide more insight and importance to the main key research question: sub-question: How will selected teaching techniques (safe place, kindness, comprehension, teacher language talk and modeling voice, and instant reactions) impact the students' mood, behavior and overall conflicts and difficulties? Key research question: what effects will well -structured and designed language disciplines and brain gym strategies have on EFL students' behavior and learning achievements? The experiment looked promising as most of the population under study felt dynamic, collaborative, self confident and productive.

Introduction

Methods of teaching are typically predicated on fixed assumptions about the mind of the learner to be taught. Is the mind of the learner a blank slate, upon which the lessons are written or engraved in wax? Or is the learner an opening flower to be

guided by the teacher as gardener? Is the development of the mind a simple build-up of habits, a continuous and gradual accumulation of information, or does the learner progress through stage-like shifts in understanding, modifying information given to him or her in accordance with that level of understanding? Are those stages ordained by physiology, evolution, or genetics? Or is the mind of a learner like an information-processing computer, with hardware capacity and speed of processing limitations, running software: cognitive strategies and procedures? Finally, there is the conception of the learner as clay to be passively molded as contrasted with the learner as active investigator, constructing reality inside his or her head with or without the help of caretakers, educational materials, cultural prescriptions and prohibitions. All of these views contain some truth, and each is also useful to educators. This entry provides an overview; specific classroom techniques can be found under the individual entry for each theory.

Main Studies in the field of Research

In *Some Thoughts Concerning Education* (Locke, 1693/ 1968), the British empiricist philosopher John Locke (1632–1704) provided the intellectual foundation for the dominant theory of cognitive development entailing that empiricism is the philosophy that all knowledge is ultimately based on sense experiences and cognitive reflection on those experiences. Thus, Locke's main educational advice was to observe learners behaving in their context and to be aware that they are observing their parents' behavior in turn. Rather than forcing them to memorize texts and rules and to beat them if they forgot, Locke recommended that a parent or tutor encourage practice of skills in carefully graduated steps matched to the age, experience, and temperament of the learner. Therefore, the learners should be encouraged to work for the praise and good esteem of their parents, rather than to receive concrete bribes or to avoid punishment. Locke believed that learners are born without innate ideas and thus are blank slates, but he said that each learner has a unique natural temperament that once observed should be taken into consideration.

Thus in the empiricist school, practice followed by any sort of praise or punishment was thought to result to a buildup of proper habits. At its best, the empiricist tradition promoted a sophisticated pragmatism. E. L. Thorndike (1874–1949), one of the

founders of educational psychology at Teachers' College at Columbia University in the early 20th century, believed that education did not expand general ability. Rather, he believed that every mental task could be defragmented into a series of discrete actions or thoughts that had met with success in particular tasks. Once a process had been trained to mastery in the classroom, only those elements that were the same between the training session and the new situation would transfer. This *identical elements* theory of education de-emphasized massive rote learning in favor of taking care that habits should be explicitly useful in the world.

The Mind as the Information Processing Model

Philosophers, psychologists, and educators have frequently proposed metaphors based on the advanced technology of their times to understand the mind. Locke's view of the mind was really a mental chemistry model. Information processing theory sees the mind as a computer analyzing symbolic code data with strings of commands (software programs) through electronic computers with hardware components such as input devices, working memory, and long-term storage. This led to several findings concerning cognition and memory:

1. Adult memory can be characterized by a multistoried model: A vast amount of unanalyzed information is captured for a fraction of a second (visual) to a couple of seconds (auditory) in a sensory store. Attending to information captures it and moves it to a short-term store before it fades.
2. EFL beginner learners most of the time lack the ability to deploy memory and thinking strategies effectively, even though they would be helpful, because they lack *meta-memory* or *meta-cognition*. That is, they may not accurately think about memory or think about thinking the relevant experience to know which strategies to use in which contexts, or find it very difficult to monitor their own thinking processes while using them. However, considerable research suggests that predicting what will come next in a paragraph, estimating how many things they might remember. Similarly, summarizing, checking one's work, formulating questions about reading passages or other exercises in thinking about thinking promote meta-cognition, which can be

conceptualized as higher order programs about how to deploy strategies and which tend to promote comprehension.

Constructivism and Approaches to foster Learning

There are approaches which foster learning as a gradual filling up of habits, as in empiricism, or data and programs, as in information processing. Some approaches rely on evolution to provide the timing for a gradual unfolding of capabilities. To Jean Piaget (1896–1980), learning was neither the mere acquisition of knowledge nor the unfolding of development. In his constructivist theory, learners cannot merely copy and store what their teachers say, but they must act upon the world, first literally, by grasping it and sucking it, then symbolically, through language, and, finally, logically, through a combination of testing, experimenting, questioning, and reasoning, first with the concrete world and then with the formal logic of science and algebra. Piaget's theory is also a hierarchical stage theory. Each stage represents a qualitatively different, progressively more complex and abstract form of thought that is built on the stages that necessarily must come before it.

Piaget focused largely on the development of notions of space, time, objects, mathematics, logic, and scientific thinking. These areas of knowledge have a defined right answer in development, unlike those in the humanities. The details on early 20th-century research on these topics can be found in other entries, but several general principles are dealt with here:

1. Knowledge forms self-organizing structures;
2. The learner must invent to understand through manipulation;
3. Contradiction speeds development and widens the “grasp of consciousness” (Piaget, 1976). The self-constructed structures of knowledge are invariably challenged by how the world is:

The teacher therefore, must guide and challenge and explain because the learner needs explanation for active understanding. Learners progress through the same major stages but not at the same rates, depending upon experience and skill of educators, but that is not all that matters.

The Social and Cultural Bases

According to our readings and reliable realities, learners are part of a social community, born into a culture with caretakers, peers, teachers, and social structures that actively help their growth and hinder their movement into culturally prohibited patterns of behavior. Their actions do not form an environmental layer on top of biological development, they come to constitute thought itself over time. Language and culture are tools of thought, allowing them to learn, memorize, and reason in different and better ways than they could.

The following may highlight and give more insights to our arguments:

. There are several basic tenets of socio-genetic psychology:

1. Thought begins as social interaction and is then internalized (Vygotsky, 1978, 1986).
2. Learners are capable of more advanced behavior with help than they are alone. At any given time, the number of tasks they can accomplish with help is far greater than those they can accomplish alone. Intelligence, then, is partly social.
3. Language and culture are tools for thought. They can rehearse steps of a process or lists of items, state hypotheses to themselves and test them.
4. Culture and history are in every task, even internal cognitive ones.

Evolution and Motivation to Learn

One important implication is that the motivation to acquire school-taught secondary abilities. In other words, one important difference between primary and secondary cognitive abilities is the level and source of motivation to engage in the activities that are necessary for their acquisition. Even though reading is a secondary ability, many people are motivated to read. The motivation to read, however, is probably driven by the content of what is being read rather than by the process itself. In fact, the content of many stories and other secondary activities (e.g., video games, television) might reflect evolutionarily relevant themes that motivate engagement in these activities, such as social relationships and social competition.

In fact, research in cognitive and educational psychology indicates that some forms of secondary learning will require activities that differ from those associated with the fleshing out of primary abilities. These would include, among others, direct instruction, in which teachers' provide the goals, organization, and structure to instructional activities and explicitly teach basic competencies. The mastery of secondary domains also requires extensive exposure to the material, distributed over many contexts and oftentimes over many years, as well as extensive practice in using any associated procedures. Extensive exposure and practice also appear to be needed for the development of primary abilities, but this exposure and practice automatically occur as learners engage in social discourse, play, and exploration.

The Procedure

As EFL professionals, we teachers find the idea of cognitive psychology so captivating, entertaining and persuasive. As a matter of fact, we strongly believe that this principle will not only revolutionize the teaching and learning process, more, the education institutions in general will become serenity environments where each class would be transformed into an optimal-learning environment where every activity will perfectly be matched to each student's individual learning styles and intelligences as well. The paper at hand is a trial experiment conducted with first year EFL learners at the department of English, University of Bejaia. Therefore, the research methodology has been designed according to this situation as most of the first year EFL learners present some kind of shyness, apprehension and frustration in front of the new environment where only English is used. Based on observation and experimentation techniques and cemented by questionnaires as tools to gather reliable data, we hypothesized that ideas designed by brain experts, who conducted complicated experiments consisting of implementing and involving "Brain Gym" before the lecture is delivered might be a future theory that will promote in class collaborative movement as a learning aid and provide the EFL learners with creativity and self confidence. The experiment looked promising as most of the population under study felt dynamic, collaborative, and productive.

Applied Linguistics, Cognitive Science and Cognitive Psychology

Researches in foreign or second-language acquisition have, in modern times, taken a cognitive approach. Cognitive research is concerned with the mental processes involved in language acquisition, and how they can explain the nature of learners' language knowledge. This area of research is based in the more general area of cognitive science, and uses many concepts and models used in more general cognitive theories of learning. As such, cognitive theories view foreign or second-language acquisition as a special case of more general learning mechanisms in the brain.

- **The Computational Model**

The dominant model in cognitive approaches to foreign or second-language acquisition, and indeed in all language acquisition research, is the computational model. It involves three stages. **In the first stage**, learners retain certain features of the language input in short-term memory. (This retained input is known as *intake*.) **Then**, learners convert some of this intake into foreign or second-language knowledge, which is stored in long-term memory. **Finally**, learners use this second-language knowledge to produce spoken output. Cognitive theories attempt to codify both the nature of the mental representations of intake and language knowledge, and the mental processes which underlie these stages.

- **Discover how to increase your students' learning abilities & dramatically improve their behavior**
- Increase your concentration, learning ability, focus and memory (so that you can learn faster and achieve more)
- Become better organized (so that you can complete tasks easily)
- Improve communication and enhance relationships (so you can achieve peace and harmony with your family, friends and work colleagues)
- Be more relaxed and calm (so you can avoid emotional outbursts)
- Improve coordination, balance, flexibility and freedom of movement (so you can improve posture and perform better at work, sports and music)
- Develop healthy habits (so you can move forward and achieve your goals)

- Increase energy and vitality (so you can keep up with your busy lifestyle and get more done in less time)
- Encourage creativity, self expression and self responsibility(so you can connect to your heart and follow your dreams with your unique talents)
- enhancing living and learning through the science of movement;
- celebrating each individual's unique learning style; and
- Creating and promoting educational and wellness programs designed to increase human potential, reduce stress, and address learning challenges.
- **Learner practice facilitates learner learning.**
- promote play and the joy of learning
- draw out and honor innate intelligence
- build awareness regarding the value of movement in daily life
- emphasize the ability to notice and respond to movement-based needs
- encourage self-responsibility
- leave each participant appreciated and valued
- empower each participant to better take charge of his own learning
- encourage creativity and self expression
- inspire an appreciation of music, physical education and the fine arts

Cognitive Psychology and Language Learning Into Action

- Students' category: a)-those who remember; b)-those who improve but forget; c)those who never use new words
- Make a memory plan through quick vocabulary games:
 - ❖ Games with flash cards (guess what the final card is)
 - ❖ Memory chains (activities with sequences)

- ❖ Five words beginning with (A/B/C/...)
- ❖ Sloppy hands (according to the specificity of the language to learn)
- ❖ Mind maps
- ❖ Note books (with separate sections)
- ❖ Online stuff (quiz let: guess, say, then check)
- ❖ Five types of (things you find in/ words with opposites)

Chosen Entertaining Activities to Break the Ice

Warm up: building a social networking with likes and dislikes: here the teacher provides the learners with a thread which should go from one learner to the other while expressing likes/dislikes, or even speaking about oneself. The aim is to build an academic/classroom net where the learners will be able to know each other.

Drill 1: splash on words: chosen words from the context or from the teaching syllabus; displayed on cards and on the board or wall. This activity needs rapidity, genuine thinking and a very simple material; a rule for instance to hear the sound “splash”

Drill3: describing graphs

- This activity is based on the learners’ memorization of some adjectives (types of adjectives already taught and learned). Through drawings the learners should be able to determine or show the appropriate graphs according to the teacher’s instructions. For instance:
- Reached a peak/ a sharp rise/ a sharp decrease /remained constant / a gentle increase/ a gentle decrease.

Conclusion

We as teachers, acting as Cognitive psychologists are a bit like those early explorers who set out to find a new route to India. Everything they discovered was new and exciting, but it didn't mean they knew what was coming over the horizon, let alone know how the whole thing fitted together.

Compared to mapping the human mind, mapping the globe was a skip through the park. So let's have a skeptical view of the work cognitive scientists do, take what's useful and practical, and call their ideas what they are – theories and practices rather than evidence.

So much so, “Three Learners in the Same Boat” is actually not an easy and agreeable trip taken for granted; but a reality which depicts our education process where three categories of learners have been observed, analyzed and interpreted: the first category relates those who remember and practice, the second reflects those who remember but never practice; while the third demonstrates the learners who neither remember nor practice. Therefore, using this education psychology inherent in introducing a teaching and learning strategy embedded in “Brain Gym” not only creates an entertaining teaching and learning environment; but sets a great sense of responsibility, respect of the other and a basis for collaborative and cooperative teaching and learning processes.

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