

Developing L2 Phonological Awareness in Infant Education: The Scaffolding and Dmaic Importance

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Abstract

We currently live in a world that is constantly being upgraded. This upgrade focuses on current education systems, and particularly the new techniques' implementation during the lessons, turning traditional systems into new attractive ones, and encouraging the students' curiosity for learning.

To begin with, it is important to keep an eye on language features before making a new implementation. Language features mean a key point to consider, also a barrier, commonly obviated by several teachers. In particular, the main feature highlighted will stand the pronunciation and writing specs of English (hereinafter L2) and Spanish (hereinafter L1). English shows a transparency speech. The coordination between the pronunciation and the spelling is direct. However, English shows an opacity feature. In other words, there is no direct coordination between the letter sounds and its writing.

This remarkable L1 and L2 difference compels them to devote some time to learning both languages grammar and speaking management, and to set an isolated phonological awareness (hereinafter PA) development.

Keywords: Phonological Awareness, Infant Education, Scaffolding, DMAIC, English

Nowadays L1 and L2 Situation, Language Acquisition and Brain Perspective

Language is an exclusively human-born ability. This human feature allows us to register on any physical or digital device such as papers or a digital recording, all kinds of human knowledge or discoveries.

Noah Chomsky (1965,1968) postulated the innatism theory. Published in 1960, this theory states, humans have an innate ability to speak since birth. To accomplish this skill, humans need to be exposed to an external incentive. This issuer needs to broadcast a suitable stimulus with which the receiver (in this case, parents) gradually integrates the target language (L1 or L2).

The main mechanism behind this allows people to acquire Universal Grammar (Hereinafter UG). UG plays a twofold role during the L1 or L2 acquisition. First, the exposure to these two

languages' stimuli allows children to progressively integrate the L1 or L2 grammar rules. The misuse of grammar rules at an early age of children in infant education (3-5 years old), shows students learning progression, in other words, what type of vocabulary they know, determines the type of input are they immersed in and through its constant practice helps them to progressively correct themselves.

Considering this sort of situation, teachers need to pay attention to their student's output and gradually correct following the natural speech. In other words, grammar mistakes should be corrected always keeping in mind the student's learning capacity and appreciating progressively how they introduce it naturally into their daily conversation.

For instance, Spanish irregular verbal tenses mean a strong struggle in early children due to their irregular conjugation (yo

cabo “to fit” (wrong conjugation) instead of yo quepo (right conjugation)). The same author refers to this section as the language’s inner structures.

Second, this UG stimulation, at advanced levels, enhances language manipulation by introducing new literacy language skills (irony, metaphors, etc.). This section is named by Chomsky as the superficial structures.

Nevertheless, these previous structures request an external stimulus to gather a proper function. The quality of the input is the key to understand this procedure and most importantly, it sets a remarkable difference between the learner’s output during the first life year child (Pre linguistic stage (12 months) and linguistics stage (12 months -5/7 years old) [1, 2].

Brain Perspective, Scaffolding and DMAIC Structure Implementation

Teachers achieve the education law’s targets through several lesson plans devoted to achieving those objectives. However, rarely do teachers make a previous assessment about what their students know about any topic. This pre-assessment avoidance always depicts a starting point about our student’s previous knowledge of any topic, including language itself.

All content acquisition follows a gradual leveling. This means any student can achieve a higher level without the proper integration of the previous levels [1]. Defines the Zone of Proximal Development (hereinafter ZPD) as the top knowledge limit achievable by a student during an intervention (didactic units, lesson plans, etc.). Following this concept, language can be defined as a ZPD by itself, considering the difference between transparent language (Spanish) and opaque language (English). The lack of correspondence between its pronunciation and the proper spelling affects the proper brain function [3]. At the time of establishing any conversation, the brain areas perform a specific function with which the conversation quality is set.

The conversation process starts with the sender. The sender is the person or the object uncharged for elaborating a sentence. This sentence is coded through a specific language (Spanish, English, Chinese, etc.), and sent through a specific system (air, phone, or another device) to be decoded by the receiver. The content of the sentence includes a specific amount of contextualized information with which the receptor gets any piece of information in regard to a specific topic.

Through this process, the receptor’s brain needs to understand the message’s content. Once the message is received through the listening human system, the Superior Temporal Gyrus (hereinafter STG), divides the connected sounds into smaller units called phonemes.

These combined phonemes are collected by the Time Flow Index (TFI). This section retrieves and also interprets the message information sent by the issuer with the receptor’s personal lexicon. This analysis provides the sentence meaning to the receptor and consequently, the proper answer is performed through Broca’s section.

The Broca’s section needs to set a proper coworking with Wernicke’s and STG. This proper coworking system allows the per-

former to set the proper syntax, phonology, and phonetic sentence performance [4].

Considering this brain perspective, the quality of the input has a strong effect on the receiver’s output quality [5, 6]. Besides, its proper usage helps receivers avoid the possibility of getting any mistake fossilization (It is a grammar or pronunciation mistake commonly integrated due to a wrong language usage; its correction normally requires a theoretical study to be solved).

This language procedure needs to be implemented during the infant education stage (3-5 years old). Following [7, 8]. The meaning of the language acquisition depends on three factors:

- The proper interaction with the students in their mother tongue and the L2 enhances language fluency.
- The activities performed need to enhance student’s interaction and communication skills.
- The feedback provided by the teachers needs to follow a positive attitude and never be conveyed as an “error” but a new opportunity to improve themselves.

Most of the concepts introduced at early ages in our current sessions have a direct correspondence with reality. Nevertheless, these systems aim for L2 immersion, which means teachers can’t use the L1 to make a connection between the L1 and the L2. Considering this situation, teachers need to support the lesson concepts meaning through an extra representation known as a scaffold (images for example).

This scaffold effectiveness changes with the proper DMAIC structures implementation. DMAIC is the singles of (Define, Measure, Analyze, Improve, Control).

- **Define:** This step sets the final lesson targets and also the real benefits of its performance.
- **Measure:** This step sets the learning process limits enhancing its effectiveness.
- **Analyze:** This measure checks the results according to the previous limit set.
- **Control:** This measure analyses the limits of implementation also its effectiveness.

This structure implementation helps teachers to set a more accurate way to achieve the final lesson goal considering all the previous feedback retrieved during all sessions.

Conclusion

The current education system progressively getting immersed in a brand-new facewash learning system. These new systems aim to accomplish the following target: to enhance English language acquisition through an immersive system [9].

Immersion systems enhance language acquisition because their performance enhances students’ L2 learning but they can’t reach this level only through a continuous dialogue. All lesson contents require external support devoted to enhancing the contents’ meaning [10].

Besides, these contents need to be meticulously graduated considering, not only the DMAIC structures but also, the previous students’ knowledge regarding a specific topic, otherwise, the learning effectiveness will be negatively affected and most importantly, it will trigger negative experiences for the students.

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