Hexágono Pedagógico
Revista Científica Virtual de Pedagogía
ISSN: 2145-888X

Artículo original Recibido: 14/01/2020. Aceptado en forma revisada: 17/05/2020

# *Implementing PBL assessed by E-Portfolios to Foster Oral Fluency Skill in an EFL Setting. Implementación del PBL evaluado por E-Portafolios para fomentar la fluidez oral en un entorno de inglés como lengua extranjera*.

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***Abstract.***

The necessity of a learner- centered approach, and the scarce oral fluency input reinforcement, drove this mixed method Action Research study. The purpose of this study was to foster students' oral fluency through the implementation of PBL assessed by E-portfolio. The study was divided into three cycles. The data collection techniques to gather the information such as observations, field notes and audio-recordings provided the following findings through longitudinal and Thematic analysis. The input on compensation strategies enhanced oral fluidity, the rate of fluency factors, in particular, Frequency of pauses, reduced notably, False starts and Self-correction reduced minimally in A1 apprentices' speech production during PBL principles and "PET" implementation. Nonetheless, the role of the E-Portfolio needed gradual rehearsal.

***Key Words:*** PBL, Assessment, E-portfolios, Oral fluency factors

***Resumen.***

La necesidad de un enfoque centrado en el alumno y el escaso refuerzo en el inicio de la fluidez oral impulsaron este estudio de investigación de acción con metodología mixta. El propósito fue

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Hexágono Pedagógico
Revista Científica Virtual de Pedagogía
ISSN: 2145-888X

fomentar la fluidez oral de los estudiantes a través de la implementación de PBL evaluado por E-portfolio. El estudio se realizó en tres ciclos. Las técnicas para recopilación de la información son observación, notas de campo y grabaciones de audio, proporcionaron los siguientes hallazgos a través del análisis longitudinal y temático. la información sobre las estrategias de compensación mejoró la fluidez oral la tasa de factores de fluidez, en particular, la frecuencia de las pausas, se redujo notablemente, los falsos comienzos y la autocorrección se redujeron mínimamente en la producción del habla de los aprendices A1 durante los principios de ABP y "PET " implementación. No obstante, el papel de la cartera electrónica necesitaba un ensayo gradual.
***Palabras clave:*** ABP, evaluación, portafolios electrónicos, factores de fluidez oral.

**Introduction.**

Leonid Afrémov *"Le Peintre"* Painted *"La Ballerina"*( n.d) under this illustration, the picture elucidates the way *"La danseuse"* sets up before performing the skills acquired. The singularity of Afrémov's paintings is the colorful background and the painting technique. In this portrait, the painting technique gives a soft brush-stroke to *"La Ballerina"* that reflects an accurate and smooth ballet dance. Drawing a parallel between *"La Ballerina"* and a language learner, the latter as well, needs constant rehearsal on skills acquired in a formal instructional setting, likewise the ballet dancer at a dancing academy; considering that, the "performance" of a language learner is the act of speaking, which displays the input provided. Thus, in order for a language learner to practice what has been learning and demonstrate it onto a stage, needs an instructor that guides his learning path.

Besides this, the facilitator who is in charge of monitoring language performance must select an approach that promotes flexibility in communication to convey a message in the target language. Hence, an eclectic approach that is learner-centered, and develop skills for enhancing communication is essential; on the grounds that, Project-Based Learning (PBL) meets the requirements, this approach offers the growth of oral fluidity through constant communication on project construction.

In the same spirit, the *"Ballerina"* and the language learner *"dance"* precisely when proper instructions have been given, onto the scenery (in and outside the classroom) they both

play the role of active doers of the learning approach by virtue of involvement. Therefore, they both assess their skills with trial and error, which conducts to natural "movement" and self-view on their progress. This is what this research is aiming at, this is what PBL is all about. *Vous-voulez dancer et découvert les vertus du PBL? Allons-y!* (Would you like to dance and discover the virtues of PBL? Let us do it!)

***Research objectives.***

**General objective.**

- To foster students' oral fluency through the implementation of PBL assessed by E-portfolio in an EFL setting.

**Specific Objectives.**

- To identify oral eloquence aspects through an oral pre- test and a checklist.
- To implement Project-Based learning approach through lesson planning.
- To assess students' artifacts via electronic portfolio.
- To analyze students' oral fluency factors by means of an oral post- test and a checklist.

***Theoretical framework.***

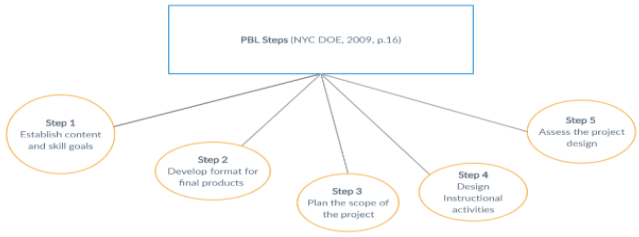
**Project- Based Learning.**

Project-Based Learning Approach (PBL) is holistic in nature, in-depth investigation of a real-world topic.(Educational Technology Division Ministry of Education, 2006, p. 1-4). As a matter of fact, PBLis an approach to instruction that teaches curriculum concepts through a project (Bell, 2010 a, p. 41). PBL is the instructional strategy of empowering learners (Curtis-Bey,2009,p.8) With the attained knowledge "students create tangible results" (Goodman, 2010 a, p.1) In nature, PBL is centered on learning that emanates from a real project. Bell (2010 b) stated, "The outcome of PBL is to generate greater understanding of a topic" (p.39). This is why, "Projects enhance deep understanding, improve competence in thinking (learning and metacognition)" (Blumefeld et al., 1991b) In a nutshell, PBL encourages deeper and reflexive thought by means of nurturing learning performance,

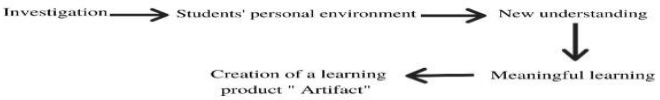
Hexágono Pedagógico
Revista Científica Virtual de Pedagogía
ISSN: 2145-888X

Together with, a relevant characteristic of PBL in Thomas' words (2000 b) "PBL projects incorporate a good deal more student autonomy…" (p. 4) that is to say, PBL as a classroom approach develops independent apprentices, and cultivates a sense of self-regulation of their work.

Overall, the succeeding illustrations include the most remarkable PBL principle, the planning process. Besides this, according to the Curtis-Bey (2009a) provides guidelines of how PBL projects must be thoroughly planned (see below graphic 1) and according to the selected authors the investigation process that is tight to PBL (see below graphic 2)




PBL Steps Curtis -Bey, 2009. Graphic 1




Bell (2010) Thomas (2000). Graphic 2

**Electronic Portfolios**

Electronic portfolios (E-P) are now considered "the next big thing" (Young, 2002 quoted by Barret.H, 2006b) Likely, Chanpet & Chomsuwan, (2013 c) with the use of E-P, students have the chance to reflect upon their learning " cited by Gülbahar &Tinmaz (2006). Moreover, E-P have three integral purposes: Process/reflective, showcase, and assessment. The objective of the E-P is to promote "sustainable assessment" (Boud, 2000)

**The Act of Speaking.**

Synthesizing Thornbury's theory (2005) about the macro skill, the author asserted that, speaking is "linear" "words follow words and phrases follow phrases" at the level of utterance speech is

created "utterance –by utterance" as a response to the "word-by word" and "utterance –by utterance" to the person the speech is addressed to (p. 2).Hence, formulating a speech converges decision-making on word choice, syntax and "*script"*, *"topic"* and "*comment"* At the formulation stage, transition words compensate the intermission in spoken production called *"Add-on Strategy"* (Thornbury, 2005a) or *"Compensation devices"* (Bygate, 1987, n.d) which hold the conversation flow. Coupled with, to attain approximately a degree of fluency, nearly a degree of*"Automaticity"*is indispensable. (Thornbury, 2005b) In a broad sense, the purpose of speaking is "transactional" and "interpersonal" (Thornbury, 2005d) truly, the act of speaking is interactive in nature. Thus, interaction skills like Turn- taking might help students become fluent speakers, notably, those skills are intrinsic tied to PBL projects.

**Fluency**

What does fluency exactly mean? The term fluency is not limited to oral expression, but in all of the well-known four language skills (Nation & Newton, 2008). In the lights of fluency, Ellis (2009) defined it as "the capacity to use language in real time, to emphasize meanings…" (p. 475) cited by Garbati & Mady (2015) in a nutshell, fluency can be also defined as "the ability to process the L2 with 'native-like rapidity" (Lennon 1990 , Housen & Kuiken, 2009).Then, what factors determine the degree of fluency in speech flow? according to De Jong, Steinel, Florijn, Schoonen, & Hulstijn (2013) the factors that allow "smoothness and ease of oral linguistic delivery" particularly, the *frequency of pauses* (Thornbury, 2005h). Pauses are defined as periods of silence of 0.2 seconds or longer (Gorsuch, 2011a) and the ones that "occur at the intersection of clauses" (Thornbury, 2005i). *False starts* can be defined as compensation mechanisms in articulation when wrong words pops out (Thornbury, 200j) likely, simultaneous "attempts to maintain contact with their interlocuters" (Olynack et al., 1990, p. 141 quoted by Gorsuch, 2011b, p. 3) and *Self-correction* "retrace and repair" of the spoken production (Thornbury, 2005k). Then, based on Thornbury's contribution, this study will be related to his theoretical base. Considering that, the contributions in the speaking and fluency arena are of paramount importance to develop oral fluidity among participants, which is fundamental to understand the process that entails communicating in a FL.

Hexágono Pedagógico
Revista Científica Virtual de Pedagogía
ISSN: 2145-888X

**Developing Fluency skill.**

All these features [facilitation, compensation] may in fact *help* learners to speak, and hence help them to *learn* to speak . . . (Bygate 1987, 20-21; alluded to Vílimec, 2006, p. 11) In few words, teaching compensatory strategies enrich lexicon."Lexis is the core or heart of language" to develop a cohesive and tangible thought (Lewis, 1993 & Akkakoson, 2016, p. 89) which help learners become confident speakers. Hereafter, Nation & Newton (2008a) suggested different types of activities to develop oral fluency skill and boost sureness in FL. Like, Easy tasks and message focus (p. 154) the author advises other techniques to develop fluency such as planning and preparation, repetition and time pressure (p.155) research outcomes on those techniques has demonstrated the efficacy in oral fluency.

**PBL and Oral Fluency: How to fit them in?**

Adjusting some principles from the hitherto mentioned oral fluency techniques such as planning, preparation, learners' prior language experience (scaffolding time) time-management, in one named "PET" (time, experience, planning, and preparation) might affect students' speech fluidity.

***Methodological design.***

**Research question**

The questions that drive this dissertation are based on improving teaching practices to foster oral fluency since the very roots of A1 (1) What changes in Oral fluency skill might take place after the implementation of PBL assessed by E-portfolios in EFL learners? (2) To what extent do students develop a self-view on their progress after using PBL assessed by E-portfolios?

**Research Tradition**

The across-method tradition of this dissertation is mainly qualitative in nature, and for a particular aim, quantitative. A qualitative research (QlR) as Richards (2003) explained is "multimethod in focus, involving an interpretive naturalistic approach" this means that a qualitative research studies phenomena in their particular context. Similar to Golafshani, (2003) who emphasized that a qualitative research seeks to "understand phenomena in context-specific settings, such as "real world setting". This author remarked that, in qualitative research, "the

researcher is the instrument" (Patton, 2001& Golafshani, 2003a) since a QlR "impacts on the person doing the research" (Richards, 2003a) the outcome of this, affects the affecter, the latter, impacts as well on participants, becoming QlR in a "Horizontal inquiry."

Richards (2003) pointed out some key characteristics of QlR:

1-Studies human actors in natural settings. 2- Seeks to understand the meanings and significance of these actions from the perspective of those involved.3-Focuses on a small number of individuals or groups.4-Employs a range of methods. 5-Bases its analysis on a wide range of features.6-Only uses quantification for specific purposes (p.10)

To understand the *heart* of QlR, it needs to be deemed from the *ontological, epistemological, axiological, rhetorical and methodological* (Lincoln, 1998 adapted by Creswell, 2007) assumptions, these features are underpinned on a set of beliefs (Yilmaz, 2013) such as: 1-Reality is subjective.2-The distance is lessen between the researcher and the object of study.3-Research is value laden.4-Qualitative terminology is used to give an account of events. 5-Inductive logic and contextualized study (p. 316)

Unlike QlR, quantitative research (QnR) describes events based on numerical facts, these scholars Aliaga & Gunderson (2000) cited by Muijs, D (2010) provided a definition of QnR such as: "Quantitative research is explaining phenomena by collecting numerical data, that are analyzed using mathematically based methods (in particular statistics)" (p.1). Holding the view that, QnR tests theory and measures variables statistically (Creswell, 1994; Gay & Airasian, 2000; Yilmaz, 2013a). One of the main features of QnR is the reliable analysis of the data gathered, since numerical information is precise and concise. Further, another quality to consider about QnR is the fact that, it presents findings "parsimoniously" (Yilmaz, 2013b) which means that they are tight to objective proof.

The previously mentioned set of postulations describe as well the central characteristics of QnR as follow:

1-Objective view.2-The distance between the researcher and object of study is independent.3-Research is value-free.4-Terminology based on measurability and indices.5-Deductive and impartiality (p. 314)

The set of writers provided a variety of points to contemplate on research traditions, the mixed method approach of the succeeding inquiry portray the extent to which the criteria for

evaluating research approaches are reliable and valid in order to regulate its quality. The terminologies used, to control the effectiveness of an inquiry are *Reliability and validity*. Now that, they differ in their conceptual and applicable frame to each approach, the notion of *Reliability* indicates the "consistency to which a research instrument measures the variables" (Yilmaz, 2013c) and it focuses on data not instruments. The author Yilmaz (2013d) explains the different types of *Reliability,* the one that correlates with the current study is *Parallel forms reliability,* which determines "whether two forms of the same instrument administered to the same group of people measure the same characteristics." In the same way, the concept of *Validity* refers to the accuracy of data "it measures what it supposed to measure." Likewise, *External* and *internal validity*, which are the treatment of the investigation concern, the outcome, and its effect. (p. 318). The focus on the aforesaid issues assure that the data collection techniques will be valid and findings will provide legal source of information

**Research design**

The research design of the study is Action Research (AR). In essence, according to Mills (2000) AR is "a systematic inquiry done by teachers (Or other individuals in an educational setting) to gather information about, and subsequently improve, the ways their particular educational setting operates, how they teach, and how well their students learn." Likely, Cohn, E. R., & Hibbitts, B. J. (2004) emphasized that AR is "both a sequence of events and an approach to problem solving it comprises iterative cycles of gathering data, feeding it back to those concerned, analyzing the data, planning action, taking action and evaluating, leading to further data gathering and so on."

As Richards (2003b), stated AR moves from descriptive /interpretive to interventionist (p.24). Also, following Villalobos' (2015) position, a relevant key point to consider about AR is that promotes "social change with practical actions… and offers feasible solutions to concerns" as well as in the academic field, AR provokes a change on its actors due to its interventionist nature that takes into action the concerning area and aims at *Improving* and *involving.*

In this regard, it is worth mentioning that AR, firstly, it improves practice, understanding of the practice and improves the situation where the practice occurs. Secondly, a relevant qualitative issue is that AR involves "hand to hand" work, not only with peers, but also with the participants themselves to improve. (Carr & Kemis 1986; Richards, 2003c, p. 24).

Hexágono Pedagógico
Revista Científica Virtual de Pedagogía
ISSN: 2145-888X

Therefore, the characteristics of AR reveals the most outstanding traits in the teaching-learning scenery, for Shani & Pasmore (n.d) cited by Coghlan &Brannick (2005) are: 1-Research *in* action rather than research *about* action.2-a collaborative democratic partnership. 3-concurrent with action. 4-a sequence of events and an approach to problem solving (p.4)

AR behaves as a gear that oscillates synchronically around its representative features; the cyclical structure mentioned above maintains the assembly. The cycle of AR develops gradually reflection over instruction. Moreover, one of the benefits of AR in relation to thMcNiff & Whitehead's (2011) contribution is that, it provides settings to "generate new knowledge" since AR integrates both theory and practice *know to and how to*, parallel to Reason & Bradbury (2008) description whom denominated AR as "practices" for the reason that the term AR goes beyond the concept of research itself. Another benefit of AR is "self-efficacy" and deeper understanding of the teaching setting, so that it gives a fresh view on schooling (Burns, Ferrer & Westmacott 2016).

With reference to Burns, Ferrer & Westmacott (2016) AR provides self-view on teaching practicum. The relevance of these writers' contribution on this study is that the reflection drove after research implementation is a *meta-reflection*, which is a reflection about the reflection in order to improve teaching procedures. As stated "self-efficacy" is an invitation to be an *"active voice"* in the teaching-learning process.

**Context**

At a public Language Center located in Km 3, on its route to Cereté, a town of Córdoba, Colombia the research will be carry out. In this Language center, the principal office is in Monteria-Córdoba, and in nearby and rural areas of the region. The social impact of the Language Center is an evidence of the global necessity of learning a FL. The population of this place is around 5.000 students overall.

The infrastructure of the Language Center somehow allows the development of academic instruction. This Language Center received a recognition by Cambridge in 2018; the resources that the Language center uses are standardized by this International entity; the range of courses are categorized per levels as follows: Kids (from 1-5) A1 Teens ( from 1-5) A2 Grown-ups (from 1-7) B1, B2.

**Participants**

The participants of this research are enrolled in an English Course, in a non-English setting like Colombia. There are eleven students, but the sample group is small, four men and two women. Some of these candidates are about to start superior studies, their age range is 18 until 20; their socio-economic status is average-medium.

On the account of English classes, the amount of time devoted to the intensive course is 12 hours a week, from Monday to Thursday, which is enough to acquire English proficiency. Students' proficiency level is A1 according to the CEFR. In view of class procedure, lesson planning is instructed by a non-native English teacher in her thirties whose methodology to approach class' objectives is eclectic, using a wide range of resources, especially, ICTs.

**Data Collection Techniques**

The data collection techniques for the research under construction are valid, reliable and sustainable since they demonstrate usefulness, practicality and flexibility. The data gathered will demonstrate the extent to which the implementation of the approach and the proposed alternative assessment might foster oral fluency skill, in particular the ones supported on the theoretical framework.

Firstly, one of the methods to collect data is *observation*. These authors, Rossman & Kawulich (1989; 2005) defined observation as "the systematic description of events, behaviors, and artifacts in the social setting chosen for study" (p.79). Similar to, Erlandson (1993) this *littérateur* provided a detailed description of what observations are all about, as stated, observations, "enable the researcher to describe existing situations using the five senses, providing a "written photograph" of the existing situation." Thus, the purpose of observation as one of the data collection procedure is to provide a thorough description of the learning encounter and its participants, by examining their language performance during class development, recorded and classified on files as *field notes*.

Besides this, to enrich the descriptions of the field notes, a *checklist* will be used to collect data on students' oral fluency, specifically on those factors of spoken discourse. Collins English dictionary (n.d) defines checklist as a list of items, facts, names to be checked or referred to for

comparison, identification or verification, which complement and validate the audio-recording data (Sutton & Austin, 2015).

Secondly, *Oral Pre- Test*. Following Thornbury's theory, a suggested speaking activity is *Noticing-the-Gap* to raise awareness on understanding, *Noticing-the –gap* activities according to the author, provide opportunities for the learner to notice their current proficiency level by assessing their own output (p. 58). The oral pre-test will uncover the panorama, and the way to address the core of the research.

Thirdly, *Lesson planning*. Lesson planning is the plan of action. In this intervention cycle, scaffolding in the target language will take place. To implement PBL, the variety of steps of this approach will be part of the C2. Then, *audio recordings* will be used (to record students' oral fluency during the research cycles) an audio recording with reference to Halcomb & Davidson (2006) allows "researchers to complete the participants' response in greater detail following the interview process." Thus, this data collection technique will provide asynchronous information of students' performance and class development.

Moreover, the role of the *E-portfolio*. This alternative assessment tool will be implemented in the C2 phase; the self-assessment purpose of the E-portfolio is to register and document students' project development and growth. Further, to assess the creation of the artifact, the use of rubrics display the criteria with which students' learning product will be assessed. It is significant to state that, for Brookhart & Nitko (2008) a rubric is a "coherent set of criteria for students' work that includes descriptions of levels of performance quality on the criteria" The main purpose of rubrics is to assess performances, alongside the authors' contribution, the use of rubrics will determine the principles to assess the artifact.

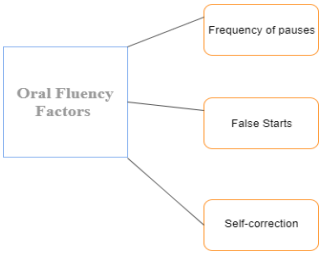
Lastly, *Oral post-test.* The Oral post-test is the final procedure to collect data, to do so; a Monologue activity likewise based on Thornbury's theory will be implemented. By this mean, the parallel form of the findings will indicate whether the information gathered on students' oral fluency skill would have progressed.

Above all, these data collection procedures are equivalent to the research tradition and design for the reason that each methodology addresses the data according to the type of the suggested approach.

Henceforward, the research cycles to conduct the investigation are as follow:

Hexágono Pedagógico
Revista Científica Virtual de Pedagogía
ISSN: 2145-888X

1)The **C1**, which is the oral pre-test, based on Thornbury's theory *Noticing-the-Gap*, activity measured by a checklist in which oral fluency factors (see graphic 1) will be further analyzed.
2)The **C2** Research in action, with scaffolding and lesson planning in accordance with Curtis-Bey (2009b, p.16) those guidelines will be taken into account for PBL implementation (see graphic 2)
3)The **C3** oral post- test based on Thornbury's suggested theory as well, which is a Monologue measured by a checklist with which oral fluidity factors will be scrutinized.




Oral fluency factors (Thornbury, 2005, p.41) graphic 2

Furthermore, for analyzing the data gathered from the oral pre-test and the oral post-test, retrieved from the audio recordings, the succeeding conversational transcription verbatim taken and adapted from the Jeffersonian transcription notation, includes the following symbols that provide a complete guideline to study data. The highlighted symbolic conventions underpin the previously mentioned fluency factors. The relevance of the conventions is that they provide a graphic example of what occurs in speech transmission.

| Symbol | Name | Use |
|---|---|---|
| [ text ] | Brackets | Indicates the start and end points of overlapping speech. |
| = | Equal Sign | Indicates the break and subsequent continuation of a single interrupted utterance. |
| (# of seconds) | Timed Pause | A number in parentheses indicates the time, in seconds, of a pause in speech. |
| (..) | Medium Pause | A medium pause, usually longer than 0.4 seconds. |
| (…) | Long Pause | A long pause, usually longer than 0.6 seconds. |
| . or ↓ | Period or Down Arrow | Indicates falling pitch. |
| ? or ↑ | Question Mark or Up Arrow | Indicates rising pitch. |
| , | Comma | Indicates a temporary rise or fall in intonation. |
| - | Hyphen | Indicates an abrupt halt or interruption in utterance. |

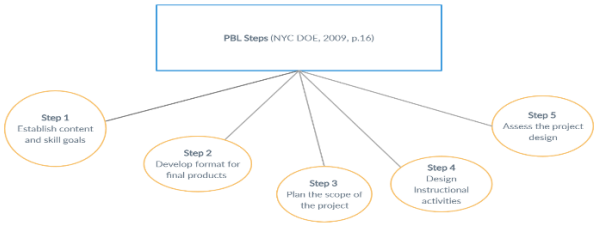
| | | |
|---|---|---|
| >text< | Greater than / Less than symbols | Indicates that the enclosed speech was delivered more rapidly than usual for the speaker. |
| <text> | Less than / Greater than symbols | Indicates that the enclosed speech was delivered more slowly than usual for the speaker. |
| ° | Degree symbol | Indicates whisper or reduced volume speech. |
| ALL CAPS | Capitalized text | Indicates shouted or increased volume speech. |
| Underline | Underlined text | Indicates the speaker is emphasizing or stressing the speech. |
| ::: | Colon(s) | Indicates prolongation of an utterance. |
| (hhhh) | | Audible exhalation |
| (hhh) | High Dot | Audible inhalation |
| ( text ) | Parentheses | Speech which is unclear or in doubt in the transcript. |
| (( italic text)) | Double Parentheses | Annotation of non-verbal activity |
| Fs | False starts | Wrong pop-ups |
| Sc | Self-correction | Self-repair. |

| Abbreviation | Name | Use |
|---|---|---|
| ***Communication Strategies*** | | |
| Cm | Circumlocution | Describing or explaining the meaning of a word |
| Wc | Word Coinage | Creating an L2 thinking that it might work |
| Fr | Foreignizing | Turning a Spanish word into the English-sounding |
| Apx | Approximation | Using an alternative word, related word |
| Apw | All-purpose word | Such as *Thing, stuff, make* and *do* |
| Cs | Code-switching | Using the L1 word or expression |
| Plf | Paralinguistic features | Gestures or variation in breath-taking |
| Ah | Appealing for Help | Leaving an utterance incomplete |
| ***Avoidance Strategies*** | | |
| Ma | Message abandonment | Abandoning the message altogether |
| Rom | Replacing original message | Replacing the original for a less ambitious |
| ***Discourse strategies*** | | |
| Bs | Borrowing segments | "Buying" interlocutor's message |

In the same fashion, the subsequent abbreviations based on the selected author, compile a range of acronyms to analyze A1 speaking exchanges data in L2 Its relevance relies on identifying the strategies that A1

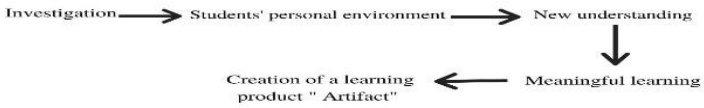
learners use to compensate L2 production in speech delivery. Principally, the highlighted sections in pink indicate which ones a L2 learner uses the most.

Additionally, through lesson planning, the variety of steps (see below graphic 3) that PBL offers work as a channel to foster oral fluency skill.




PBL Steps (Curtis-Bey, 2009, p. 16) graphic 3.

In accordance with the selected authors (Bell, 2010 & Thomas, 2000) (see below graphic 4) the PBL remarkable contents in project construction are as follow.




Bell (2010) & Thomas (2000) graphic 4.

***Data analysis.***

The qualitatitive data analysis of the study was Thematic analysis (TA) following (Braun, Clarke, Hayfield, & Terry, 2019) contributions. and the quantitative part with Longitudinal analysis (De Groot,2011)

***Findings.***

The subsequent set of tables provide a description of research findings, that were related to the proposed objectives (see below, table 1 research cycles findings, table 2 examples, table 3 fluency factors, pie charts 1-3, table 4 examples, pie charts 4-6, table 5 pre-posttest contrast, bar chart 6 and TA map)

Hexágono Pedagógico
Revista Científica Virtual de Pedagogía
ISSN: 2145-888X

Research cycles findings. **Table 1**

| Research Cycles | Findings |
|---|---|
| **C1 Oral –Pretest** | Noticing –the- gap activity showed that strategic competence means, sway in oral fluency, particularly communication strategies and production strategies helped A1 apprentices to compensate their lack L2 lexical chains and aid to convey meaning in message production. |
| **C2 Research in action** | Scaffolding and guidance showed that rehearsing communication strategies through speech planning by *useful expressions* and production strategies through *compensation devices* (Thornbury, 2009) aided A1 learners to convey message in L2 during PBL steps implementation.<br><br>In each step the students interacted in the target language following "PET" principles. |
| **C3 Oral Post-test** | The Monologue showed that following "PET" principles to foster oral fluency language exchanges in L2 were more extensive than in the Pre-test. PBL nourishes a variety of skills, the ability to communicate either upgraded in short or long chunks of L2. |

**Table 2.** Research cycles examples.

| Examples | Transcript |
|---|---|
| **C1 Oral –Pretest** | **Group 1/2 -Speaker A:** 00:26 I like go to the beach ist perfections. I like the "lik" **Wc** .. the sun *eh* is very good..<br><br>**Speaker B:** 0:00:24 one parents in the (…) ("bowest")-**Wc** *eh* -meaning forest a supermarket,(…) is cell-**Fs** |
| **C2 Research in action** | **Group 1/2 -Speaker A:** **My impression is that** there are people very wor-**Ma** with technology.<br><br>**Speaker B:** **According to me,** eh (.) people are depen..dent –**Fs/Sc** of cellphones. |
| **C3 Oral Post-test** | **Group 3-Speaker A:** I: think: going to swimming in the beach↑ ah I like (paint) my my –**Fs** room↑<br><br>**Speaker C:** My plans in the: (.) work of class |

**Table 3.** Fluency Factors.

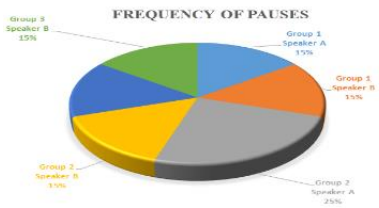
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Revista Científica Virtual de Pedagogía
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| Research Cycles | Frequency of pauses | False Starts | Self-correction |
|---|---|---|---|
| **C1 Oral –Pretest** | According to the rating scale, occurred almost always in every speakers' message conveyance, which indicated that this factor is common in A1 apprentices, whom paused to make time before delivering a message in the target language. The ratio of frequency of pauses also demonstrated that for effective communication, planning is essential. | In comparison to the rate of frequency of pauses, false starts were median higher. In relation to the rating scale, false starts mainly occurred often. | The rate of self-correction was lower than the other fluency factors. With respect to the rating scale, this factor befell almost never, which elucidated that self-correction primarily happens when there is a conscious level of L2 message accuracy. |
| **C2 Research in action** | the degree of frequency of pauses reduced markedly in view of utterances | concerning false starts, there was a considerable change, since speech statements revealed that expressing an idea in L2 was effortless than before | in regard to self-corrections the increase was minimal, which depicted that, this metacognitive skill grows in longer L2 experiences |
| **C3 Oral Post-test** | the rate of frequency of pauses had a significant reduction in message delivery, which demonstrated that, allowing A1 apprentices to plan their speech, regulate fluidity. | there was not variation in rate, which showed that the lessening of this fluidity factor denotes a positive outcome in speech transfer | there was a minimal increase, which revealed that language awareness and acquisition were taking place, which highlights a small step onto L2 maturity. |

The pie charts display the percentages of the fluency factors in oral pre-test.

Frequency of pauses. **Chart 1**

| Almost Always | Often | Sometimes | Almost Never | Total |
|---|---|---|---|---|
| 55 | 6 | 0 | 0 | 61 |

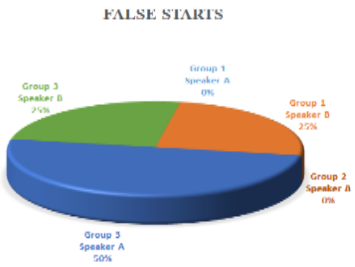



False starts. **Chart 2**

| Almost Always | Often | Sometimes | Almost Never | Total |
|---|---|---|---|---|

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| | | | | |
|---|---|---|---|---|
| 0 | 3 | 1 | 0 | 4 |




Self-correction. **Chart 3**

| Almost Always | Often | Sometimes | Almost Never | Total |
|---|---|---|---|---|
| 0 | 0 | 0 | 3 | 3 |




**Table 2**. Research cycles examples.

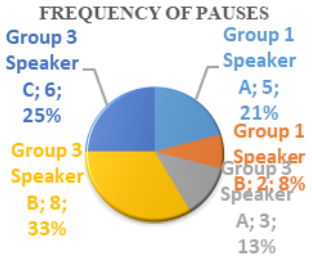
| **Examples** | **Transcript** |
|---|---|
| **C1 Oral –Pretest** | **Speaker A:** 0:00:26 I like go to the beach ist perfections(.) I like the "lik"-**Wc** ..(#) the sun *eh(#)*<br>**Speaker B:** 0:00:24 One parents in the (…) ("bowest") *eh* -meaning forest a supermarket,(…) is cell- |
| **C2 Research in action** | **Speaker A:** My personal opinion is the… the.. diverse advan..**Fs** advantage is the multicultural is from other parts of the world, but, so, the dis…**Fs** disadvantage<br>**Speaker B**: in family eh very different muy diferente –**Cs** |
| **C3 Oral Post-test** | **Speaker A:** Yes, ah::, I going to play volleyball, ehm, volleyball beach.<br>**Speaker C:** My plans in the: (.) work of class |

The subsequent pie charts show the percentages of fluency factors in the post-test.

Frequency of pauses. **Chart 4**

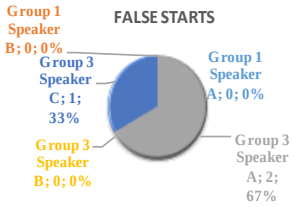
| Almost Always | Often | Sometimes | Almost Never | |
|---|---|---|---|---|
| 19 | 0 | 5 | 0 | 24 |

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Revista Científica Virtual de Pedagogía
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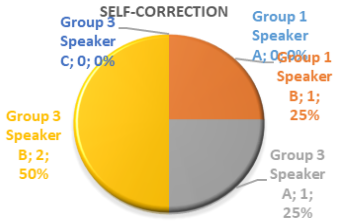

False starts**. Chart 5**

| Almost Always | Often | Sometimes | Almost Never | Total |
|---|---|---|---|---|
| 0 | 0 | 3 | 0 | 3 |




Self-correction**. Chart 6**

| Almost Always | Often | Sometimes | Almost Never | Total |
|---|---|---|---|---|
| 0 | 0 | 4 | 0 | 4 |

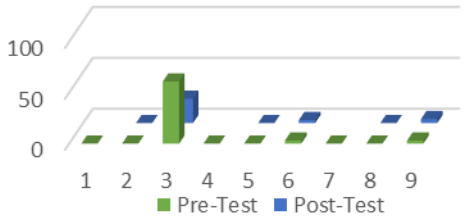



**Pre and Post-test contrast.**

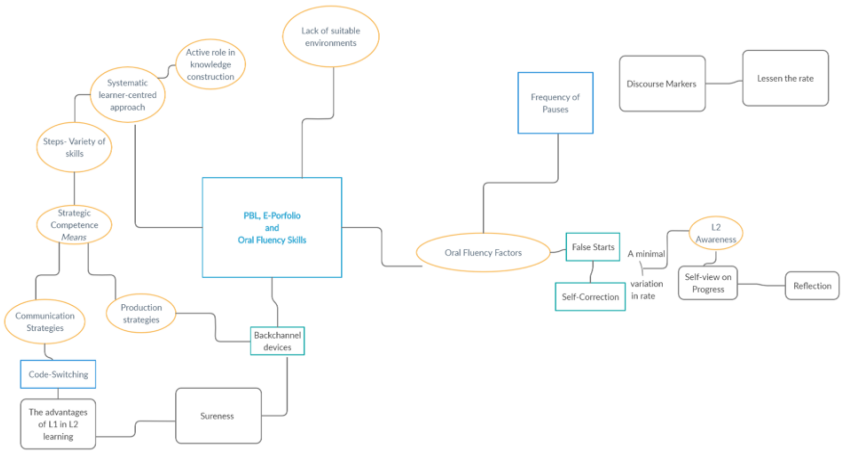
A pinpoint parallel between the oral pre- test and oral post-test, it can be said that the rate of fluency factors in the Pre-test maintained a considerable level, on the grounds that, frequency of pauses was 61 in comparison to the post-test which was 24, this indicated a reduction of the 37%. Moreover, with reference to false starts, in the pre-test were 4 conversely, in the post-test 3, the minimal decrease of the 1% showed that speech delivery developed with ease. Additionally, concerning the rate of self-correction, in the pre-test was 3 contrary to the post- test, which was 4; this demonstrated that the 1% increase resulted in L2 awareness, that according to findings occurs when L2 speakers have been exposed to continuous input.

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This bar chart represents the degree of fluctuations among oral fluency factors. In the end, it can be stated that, oral fluency skills after the implementation of the C2 cycle, the selected approach improved markedly fluidity factors among A1 population.




Overall, L2 contributions among speakers still need more rehearsal, nonetheless their attempt to communicate in the target language is valuable. Considering that, some speakers were reluctant to speak and during project development, they started to get involved. The progress was more notable in 1out of 4 participants, whom in his speech transmission the degree of hesitations reduced which sounded more fluid. The rest of the participants with small and long chunks made themselves understood.




The thematic codes paint an instance of the association between the selected approach and the aforesaid skill. Research findings demonstrated that to foster fluidity factors in A1 apprentices it is needless to remark communication and production strategies, which boost sureness in speech transmission. Furthermore, as trainees are involved in knowledge construction through a project, the variety of steps that PBL offers, allows enhancing dexterity in message

carriage. Henceforth, as conveyance takes place, oral fluency factors strengthen; the variation in rate depends on the amount of transferred output, which causes that L2 awareness progressively develops in L1 learners.

**Discussion.**

The significance of the findings, relies on improvement with respect to oral fluency factors, through the selected approach that cope with opportunities to rehearse language. In accordance with Zhang (2009) the role of input, interaction and output is that effective practices lead to oral fluency. The progress of this skill is based on those factors, as the author stated they are "three essential compositing elements of L2 acquisition" (p.91). Under this statement, they need to be articulated for language growth, henceforth, PBL offers an ample range for developing not only that skill, but more. Besides, research findings demonstrated that A1 apprentices could progress at some extent their L2 message delivery. Owing to the fact that, negative intrinsic factors like reluctance, diminished. In addition, findings also showed that during the C2 cycle, the input provided aided to convey more meaning and interaction occurred which caused that fluidity factors decreased for a positive outcome, in frequency of pauses, and minimally increased in false starts and self-correction to reveal that they both take place in L2 acquisition process.

Therefore, literature proved that PBL and oral fluency could go "hand- in- hand" Vaca Torres, A. M., & Gómez Rodríguez, L. F. (2017) research has proved that after the implementation of PBL mainly oral production and fluency improved among participants. This research verifies that progress on fluency skills is notable, attempting to communicate even more in L2 is "Language earning." Thornbury's theory (2005) was proved in this investigation, findings showed that at the level of automaticity, planning is fundamental; one of the PET principles is planning, for A1 learners, is of vital preparation before the speaking act, which requires input, in the C2 cycle scaffolding served as intervention in order to "prepare" learners for speech delivery. Moreover, Nation & Newton's (2008) contribution regarding techniques for

developing fluency were valuable for adapting PET into a suitable strategy according to learners' needs.

**Conclusions.**

In the end, the aforementioned approach, the skills involved in that, the assessment component, fluidity factors and PET drew the following conclusions.

1- For A1 population the use of L1 should be considered an advantage, in view of language sureness.
2- The number of pauses and hesitations do not indicate that the student does not know anything in the target language; it indicates that requires rehearsal on planning, language experience and transition words.
3- Time is essential in speech planning; provides a range for speech execution, oral fluency develops gradually in this way.
4- Always monitor students' oral production, positive feedback has a positive effect on fluidity.
5- Encourage language reflection, regulating learning carries out to L2 acquisition.

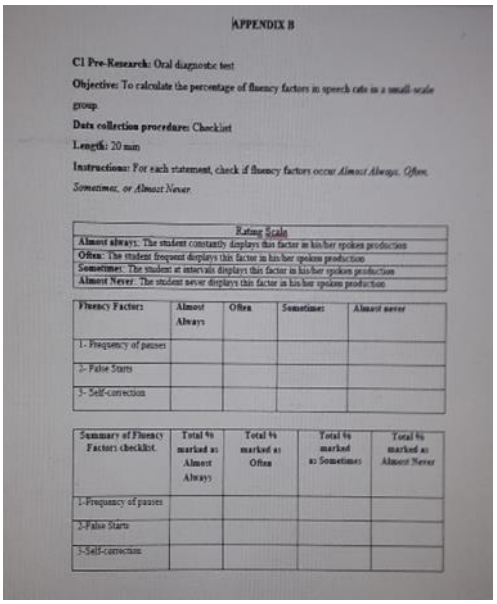
**Pedagogical implications.**

On one hand, an implication for he pedagogical field is to invest more in *Strategic competence means* in the same population, in that way, learning path will not be arduous for some students Henceforward, the author suggests novices and experienced teachers ameliorate the teaching practicum through "Learn and do" in that way the teacher-learner relationship will take an active role in learning construction.

On the other hand, the academic writer advises implementing AR within a school year, due to the nature of AR; in C2 implementation, the writer recommends to improve instructions, in that way the process may be fully accomplished. In view of the formative assessment component, it is highly counseled an appropriate environment with internet access or an English Laboratory

where students work on the E-portfolio at least two hours per week with instructors' monitoring in learning construction.

**Appendices.**



APPENDIX B

**C1 Pre-Research:** Oral diagnostic test

**Objective:** To calculate the percentage of fluency factors in speech rate in a small-scale group.

**Data collection procedure:** Checklist

**Length:** 20 min

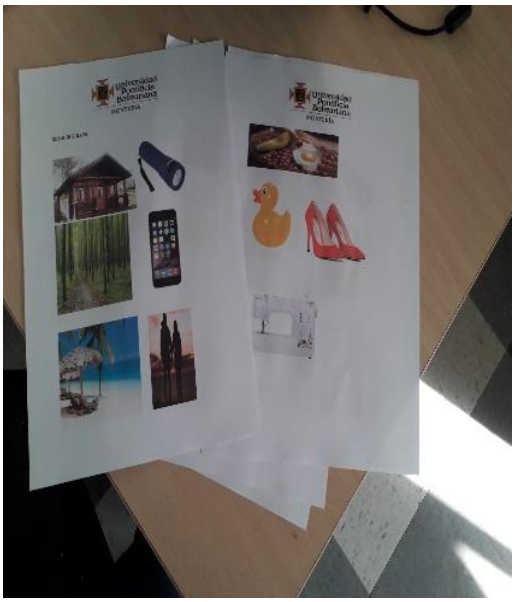
**Instructions:** For each statement, check if fluency factors occur *Almost Always, Often, Sometimes, or Almost Never.*

| Rating Scale |
|---|
| **Almost always:** The student constantly displays this factor in his/her spoken production |
| **Often:** The student frequent displays this factor in his/her spoken production |
| **Sometimes:** The student at intervals displays this factor in his/her spoken production |
| **Almost Never:** The student never displays this factor in his/her spoken production |

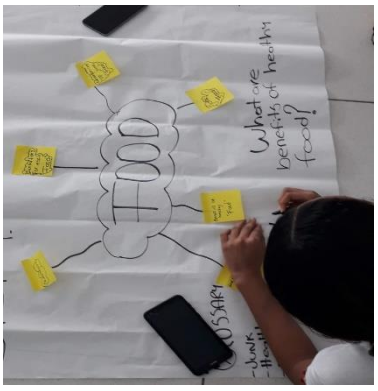
| Fluency Factors | Almost Always | Often | Sometimes | Almost never |
|---|---|---|---|---|
| 1- Frequency of pauses | | | | |
| 2- False Starts | | | | |
| 3- Self-correction | | | | |

| Summary of Fluency Factors checklist | Total % marked as Almost Always | Total % marked as Often | Total % marked as Sometimes | Total % marked as Almost Never |
|---|---|---|---|---|
| 1-Frequency of pauses | | | | |
| 2-False Starts | | | | |
| 3-Self-correction | | | | |

Checklist



Noticing-the-gap activity




Mind-map/questioning

**References.**

Akkakoson, S. (2016). Speaking Anxiety in English Conversation Classrooms among Thai Students. *Malaysian Journal of Learning and Instruction*, *13*(1), 63

Barrett, H. C. (2006). Using electronic portfolios for formative/classroom-based assessment. *Classroom Connect Connected Newsletter*, *13*(2), 4-6.

Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House*, *83*(2), 39-43.

Boud, D. (2000). Sustainable assessment: rethinking assessment for the learning society. *Studies in continuing education*, *22*(2), 151-167.

Burns, A., Westmacott, A., & Ferrer, A. H. (2016). Initiating an Action Research Programme for University EFL Teachers: Early Experiences and Responses. *Iranian Journal of Language Teaching Research*, *4*(3), 55-73.

Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. *Handbook of Research Methods in Health Social Sciences*, 843-860.

Brookhart, S. M., & Nitko, A. J. (2008). *Assessment and grading in classrooms*. Pearson Merrill Prentice Hall.

Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational psychologist*, *26*(3-4), 369-398.

Curtis-Bey, L. (Ed.). (2009). *Project-based learning: Inspiring middle school students to engage in deep and active learning*. NYC Department of Education.

Chanpet, P., & Chomsuwan, K. (2013). Development and design: E-Portfolio on project-based learning with assessment system. *International Proceedings of Economics Development and Research*, *60*, 168.

De Groot, C. (2011). Longitudinal analysis. In *The Measurement and Analysis of Housing Preference and Choice* (pp. 225-252). Springer, Dordrecht.

De Jong, N. H., Steinel, M. P., Florijn, A., Schoone R., & Hulstijn, J. H. (2013). Linguistic skills and speaking fluency in a second language. *Applied Psycholinguistics*, *34*(5), 893-916.

Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry: A guide to methods*. Sage.

Flick, U. (2018). *An introduction to qualitative research*. Sage Publications Limited

Garbati, J. F., & Mady, C. J. (2015). Oral skill development in second languages: a review in search of best practices. *Theory and Practice in Language Studies*, *5*(9), 1763-1770.

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, *8*(4), 597-606.

Gülbahar, Y., & Tinmaz, H. (2006). Implementing project-based learning and e-portfolio assessment in an undergraduate course. *Journal of Research on Technology in Education*, *38*(3), 309-327.

Gorsuch, G. J. (2011). Improving Speaking Fluency for International Teaching Assistants by Increasing Input. *Tesl-Ej*, *14*(4), n4.

Halcomb, E. J., & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary?. *Applied nursing research*, *19*(1), 38-42.

Housen, A., & Kuiken, F. (2009). Complexity, accuracy, and fluency in second language acquisition. *Applied linguistics*, *30*(4), 461-473.

Jeffersonian Transcription Notation is described in G. Jefferson, "Transcription Notation," in J. Atkinson and J. Heritage (eds), *Structures of Social Interaction*, New York: Cambridge University Press, 1984

Kawulich, B. B. (2005, May). Participant observation as a data collection method. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* (Vol. 6, No. 2).

McNiff, J., & Whitehead, J. (2011). *All you need to know about action research*. Sage Publications.

Mills, G. E. (2000). *Action research: A guide for the teacher researcher*. Prentice-Hall, Inc., One Lake Street, Upper Saddle River, New Jersey 07458.

Muijs, D. (2010). *Doing quantitative research in education with SPSS*. Sage.

Nation, I. S., & Newton, J. (2008). *Teaching ESL/EFL listening and speaking*. Routledge.

Richards, K. (2003). *Qualitative inquiry in TESOL*. Springer.

Sutton, J., & Austin, Z. (2015). Qualitative research: data collection, analysis, and management. *The Canadian journal of hospital pharmacy*, *68*(3), 226.

Thomas, I. (2009). Critical thinking, transformative learning, sustainable education, and problem-based learning in universities. *Journal of Transformative Education*, *7*(3), 245-264.

Thornbury, S. (2005). *How to teach speaking*. Longman.

Vaca Torres, A. M., & Gómez Rodríguez, L. F. (2017). Increasing EFL Learners Oral Production at a Public School Through Project-Based Learning. *Profile Issues in Teachers Professional Development*, *19*(2), 57-71.

Villalobos, O. B. (2015). Action Research: Fostering Students' Oral Production in the EFL Class. *Revista de Lenguas Modernas*, (23).

Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, *48*(2), 311-325.

Zhang, S. (2009). The Role of Input, Interaction and Output in the Development of Oral Fluency. *English Language Teaching*, *2*(4), 91-100.