

UNIVERSIDAD LAICA VICENTE ROCAFUERTE DE GUAYAQUIL FACULTAD DE EDUCACIÓN **CARRERA DE INGLÉS** PORTADA PROYECTO DE INVESTIGACIÓN PREVIO A LA OBTENCIÓN DEL TÍTULO DE LICENCIADO EN LENGUA INGLESA MENCION EN ENSEÑANZA Y ADMINISTRACION DE SISTEMAS **EDUCATIVOS EN TEFL** TEMA **INDUCTIVE LEARNING AND COLLABORATIVE DIGITAL RESOURCES IN THE DEVELOPMENT OF ENGLISH LANGUAGE** SKILLS AT THE PRESENT TIME IN 3RD GRADE STUDENTS AT **UNIDAD EDUCATIVA PARTICULAR 'APOSTOL SANTIAGO'. SCHOOL YEAR 2020-2021**

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Inductive Learning and Collaborative Digital Resources in the development of English Language Skills at the present times in 3rd grade students at Unidad Educativa Particular 'Apostol Santiago', school year 2020-2021

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Language skills, inductive, technology, application software, teaching guides

RESUMEN: The present study is aimed to describe the level of acceptance and agreement in using Inductive Learning and Collaborative Digital Resources to develop English Language Skills in the actual times using tests, surveys, and interviews. The present research has been developed to complement a classroom with induction learning and teaching and let students to use any sort of gadget for better learning. In the light of the availability of internet access, it is believed that individual tasks are better to do their jobs in an easier and comfortable way, thus the journey changes cooperative and collaborative due to the necessity to study together with people who do not have an internet pulse and access. Educators should look at the particularities of pupils and thus encourage them to link linguistic study and practice with their existing interests. This is why the development of a didactic guideline process of induction work that has a major impact on the development of language skills, for the guideline aims at helping students overcome the most common communication problems they confront because of their previous practices and lack of motivation.

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DEDICATION

Firstly, I dedicate it to God who allowed me to follow this step to be completed and provided me with wisdom and patience until the finish of this process. Then, I dedicate this paper to my parents, they pushed me with their help and support that I needed to follow my career throughout this process and be always at every point of my life.

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DEDICATION

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INTRODUCTION

In this work paper, the innovative based inductive exercises incorporate errands that are done previously, during and after the oral creation measure happens. Through the legitimate use of these exercises, understudies who love to talk, exhibit their greatest limit of correspondence, creation, familiarity and precision of the assignment.

One of the fundamental reasons the subject of innovative ludic exercises has significance is on the grounds that the educator should make a starter examination, moving toward it in a mental and pedantic manner. This earlier information, procured prior to introducing it to the understudies, is acclimatized through day-by-day living. The ludic exercises incorporate games and materials that might be related with the assignment. Hence, individual encounters related with what are expressed in the assignment, and the information that it gives is effectively and ludic adjusted. This pre-information causes understudies to comprehend the point, consolidates individual encounters, which will make the exercises appealing, justifiable and essential.

This exploration depends on the absence of interest in talking and low degrees of correspondence in the English language study hall. The examination work was directed at Unidad Educativa Particular Apostol Santiago in Guayaquil, Ecuador. The creators worked fundamentally with 3rd grade students. The interest of the creators was to decide the causes behind the absence of interest in imparting in English among Ecuadorian youth, which is established in the absence of talking, absence of jargon and timidity now and again. It featured the significance of regard and work in the phases of verbal arrangement and understanding.

The objective of this examination is to discover innovative ludic assets to foster the talking propensity and urge understudies to adjust it as a way of life to obtain more information when it identifies with conveying in English.

Chapter incorporates the subject for the current examination work, just as the foundation of the issue, its plan and systematization. The wide and explicit goals are additionally depicted and are planned to decide the significance of mastering systems in the talking abilities in 3rd grade students at Unidad Educativa Particular Apostol Santiago during school year 2020-2021. For this reason, the way innovation based ludic exercises can help understudies in oral creation is portrayed, and understudies' challenges in talking execution are recognized. The reasoning fused in this part features the significance and

social pertinence that this examination has. The recipients and the effect of the proposition are likewise clarified.

Chapter 2 portrays the Research Theoretical Framework, which incorporates those significant hypotheses that help this work. Furthermore, this segment gives definitions for the fundamental ideas talked about along the report and that are applicable and identified with the theme. The Legal Framework, that is, those laws or official guidelines in regards to Education and identified with the English language instructing are likewise clarified.

Chapter 3 gives insights about the Research Methodology, for example, the examination type and approach. The methods and apparatuses used to get the information that empowers to arrive at the goals are likewise portrayed. This part likewise presents the exploration populace and test, and the outcomes and discoveries came about because of information handling.

Chapter 4 presents exhaustively a proposition to tackle the issue of the investigation, which depends on innovation based inductive exercises with the implementation of technological resources to adapt in the recent times through the pandemic after the depiction of the proposition, ends and suggestions are drawn.

CHAPTER 1

THE RESEARCH PROJECT

1.1.Title

Inductive Learning and Collaborative Digital Resources in the development of English Language Skills at the present times in 3rd grade students at Unidad Educativa Particular 'Apostol Santiago', school year 2020-2021.

1.2.Background of the problem

Learning a new language has been a big desire in the last years on many people around the world. In this case, English is enrolled in many circumstances and moments to apply it. It is used by different people from scholars until educated people. Assuming there is a globalized world right now, Latin America still tend to be with a low average in the production of this language and Ecuador is one of the lowest on the proficiency and active production.

During the last time, a world issue happened which makes people to be at home. COVID 19 in this case enrolls a diversity of changes not only on life, but also on people's tasks. Schools have had to close their establishments to safeguard kids' lives and avoid any kind of infection during the journey. Despite of this, technology and digital resources have been on the top and has become the most used tools right now bringing many ways to enhance the language and overcome different difficulties to run a normal class.

At the same time these digital resources assumed big responsibility and a good management looking for the aim of the class and success on students. At this point, students' background should be full of prior knowledge and active learning may happen. As soon as the school year ran lately, it was observed that students have lost these knowledge making teachers to start everything from scratch and set everything back, but how would a teacher manage a class without a classroom? Computers and tablets can change it all with a combination of techniques and strategies to handle those difficulties.

It was observed that students from 3rd Grade are failing in the language production not developing appropriate skills for managing and active learning. Students may not be active enough due to mistake-making or not knowing enough vocabulary even with technology sources and digital manipulation.

1.3.Statement of the problem

How can Inductive Learning and Collaborative Digital Resources influence on the development and production of English language skills at Unidad Educativa 'Apostol Santiago' during school year 2020-2021?

1.4.Systematization of the problem

- What is the current level of third grade students?
- What is the importance of inductive teaching and learning strategies during an online class?
- How can technology tools influence an online classroom?
- Which are the most appropriate tasks or activities for enhancing language's skills?

1.5.Broad Objective

 To demonstrate how Inductive Learning and Collaborative Digital Resources determine the development of English Language Skills in present times in 3rd grade students at Unidad Educativa Particular 'Apostol Santiago' during school year 2020-2021.

1.6.Specific Objective

- To analyze the theoretical foundations about Inductive Learning and Collaborative Digital Resources to develop English Language Skills in the actual times
- To describe the level of acceptance and agreement in using Inductive Learning and Collaborative Digital Resources to develop English Language Skills in the actual times using tests, surveys, and interviews.
- To design a didactic guide to work Inductive Learning using Collaborative Digital Resources to develop English Language Skills

1.7. Justification

The present research has been developed to complement a classroom with induction learning and teaching and let students to use any kind of device for better learning. In the light of the availability of internet access, it is said that individual tasks are better to perform their tasks in an easier and comfortable way, so the journey turns cooperative and collaborative due to the need to learn together with friends who do not have an internet pulse and access. Concerning implementation, they believe that material and assignments should be accompanied by explanation. With a big variety of instruments such as surveys, interviews, diagnostic tests and class observations will be applied in order to measure students' language domain and place them correctly with appropriate digital resources.

Educators must consider students' particularities, and in this way, to help them connect language study to their current interests, and practical use. For this reason, the design of a didactic guide working induction processes which has an important impact in the development of language production skill, because this guide is directed to help learners to overcome the most common communication difficulties that they face as a result of old practices and lack of motivation. With the induction and the results after the application, they must acquire at least a basic development of the four language skills (speaking, reading, writing and listening) with a major domain of one of them helping and supporting learners to gather and engage during the actual times with online classes.

Students from 3rd Grade are the beneficiaries of this study because they will also have the access to the source of information that may contribute to the development of both English language skills. the application of a guide of interactive activities using several multimedia resources.

1.8.Delimitation of the study

Responsable Unit:	Universidad Laica Vicente Rocafuerte de Guayaquil
Responsible:	Sharon Evelyn Valencia Bayas
	Jonathan Alexander Villacis Bazurto
Field	Educación
Area:	Inglés
Population:	3rd Grade Students
Execution Period:	Periodo lectivo 2020 – 2021

1.9.Idea to Defend

Inductive Learning and Collaborative Digital Resources influence positively on the development of English Language Skills in present times in 3rd grade students at Unidad Educativa Particular 'Apostol Santiago' during school year 2020-2021.

1.10. Line of Research

The present study will be developed according to the research line of the Education Faculty, which points to the "performance and professionalization of the teacher". In addition, it is also framed under the research sub-line "linguistic competencies in teachers and students".

CHAPTER II

THEORETICAL FRAMEWORK

2.1. Theoretical Framework

For the following research, studies from international and national universities been inquired in some taken as reference related directly with this study drawing closer to the significance input from the authors behind these following researches: TEFLIN International Conference, International Journal of Research in English Education, Revista Electrónica Formación y Calidad Educativa and Universidad Laica Vicente Rocafuerte de Guayaquil.

Different writers and professionals in the area in their path to have possible answers and solutions in order to handle L2 teaching and learning way, studies and analysis about other problems inside or outside the classroom with English Language has faced through generations. Some of these authors, also teachers in the moment they started this writing process or teachers-to-be, expressing different approaches regarding to the advantages of applying inductive techniques for the better on improving a second language. Their works, analyzed and interpreted in this section will help to understand the motives for putting these pieces together.

Gunarso Susilohadi (2015) part of TEFLIN International Conference states that:

Inductive teaching approach using videoed teaching models of EFL help students gain better understanding on language and language learning concepts. These teaching models provide information or real facts which will be analyzed in group and class discussion. The outcome of the discussion is generalized concepts. The lecturer's job is to lead the discussion to focusing on finding language and language learning concepts. It was found out from the interview with some students that the students' willingness to participate in the group and class discussion was probably driven by the awareness of the students that they were going to talk about a teaching practice in a joyful way. This had created a less psychologically threatening classroom atmosphere. From the interview of some students, it was found out that they enjoyed the discussion even though they did not talk much. Along the present research, there are many theories regarding to Inductive learning. The reason behind this project comes from an early study about Methodology developed by Ryszard Michalski (1983). The following theory allow learners to proceed with a new knowledge that they can relate. In the same way the content and context presented must be appropriate and functional so students can figure out to comprehend a new topic actively and passively. The name natural induction consisting of two parts suggests that induction is done in a natural way. The induction, or more precisely inductive reasoning or learning, is a falsity preserving reasoning process in which generated knowledge is generated from observations/examples and background knowledge. The word natural relates to the knowledge resulting from learning that is in a form easy to understand by people. Thus, natural induction refers to an inductive learning process whose results are designed to be natural to people.

There are several forms of knowledge that are natural to people, including natural language descriptions, easy to interpret rules, graphical representations, relatively small decision trees, Bayesian networks, etc. These types of knowledge are referred to as "transparent boxes," as opposed to "black box" representations, which may produce very accurate forecasts but are difficult to comprehend. Neural networks, random forests, vehicles and many other machine-learning models can illustrate this. This is a very important example of the latter.

The author based his study with an overview from Natural induction which is an approach about inductive learning bringing organizations skills, algorithms and theories. He looked at different issues on a learning basis. The creation and operation of organizational process provides the field with his unique prospective and directions based on concept and the previous and new content presented. Some of these are conceptual clustering, constructive induction.

Reza (2018) establishes in one of his research papers titled "The Use of Technology in English Language Learning: A Literature Review" Techniques have been used in and outside the classes as an integral element of the learning process. Usually, each language class uses technology in some way. Technology has served to help language learning and to improve it. Technology allows teachers to adjust their teaching activities to improve the language learning process.

His study focuses on the role of the usage of new technology in secondary or foreign language acquisition of English. In the paper the author explained the use of technology in language classroom assisting students in language learning skills. Ahmadi (2017) has mentioned the strategy used by teachers in their classrooms to enhance language learning is a significant factor of learning. Language teachers were told to urge their learners to use technology to strengthen their language skills. Technology-integrated resources should allow teachers to create and design lesson effective materials for students, especially in online sessions. The usefulness and advantages of technology for learner learning should be convinced by teachers. This means that teachers require support and training for technology integration in language education. When technology is properly used, the review shows teachers and students can have several advantages. It is a resource that may be used by students since it helps them resolve their problems with learning and finds ways of using what they have learned efficiently and meaningfully.

Abreus, A & Hernández, P (2016) developed a cientific research work titled "LA ENSEÑANZA DEL INGLÉS EN LA UNIVERSIDAD ECUATORIANA ACTUAL" from a local magazine called "Revista Electrónica Formación y Calidad Educativa (REFCalE)". The following article introduces considerations in teaching English in the local area. They stated that in our country the domain of a foreign language has been suffering changes with methodology seeking an effective communicative approach induced with the content. The communication way of a language has turned into a method that shows results in students already motivated and compromised in a classroom. Therefore, the authors imply that institutions should apply medias to gain attention in the learning process with emphasis in the ICTs and constantly update of knowledge from the teachers.

At Universidad Laica Vicente Rocafuerte de Guayaquil, according to the following authors (Garcia, E; Barre, L 2020), in their research paper titled "The benefits of using websites in education to enhance the English learning process in 10th grade students at Unidad Educativa America del Sur high school during the academic year 2017-2018", providing specific information about educational websites induct students and learners in the application of different theoretical approaches aimed for the learning process.

This research work was directed to analyze the influence and application of different sources in the development of learning regarding with English. These authors analyzed the importance of websites about education, in this case with application software called "Duolingo". The type of study is descriptive, with a qualitative and

quantitative approach. The authors concluded that exposing students to this software is an effective support during a lesson. New technologies are a fundamental tool to advance in the improvement of educational processes. In the same way that research presents a didactic proposal to be applied in secondary classrooms, broken down into lessons to develop each of the language's skills.

2.2.Literature Review

2.2.1. Inductive Learning

A technique in which the student detects rules through example observation. In contrast with deductive learning, learners are set to follow rules to complete task. Making use of grammar, the teacher introduces the lesson to the students with different examples and references for an upcoming concept without implying any kind of rule or any preamble about how the concept is used. While learners identify the new concept is applied, the expectation is that they will notice the function determine the objectives and aims. Finally, the teacher with a series of questions to assess students to explain the rule for better comprehension and undertake the constant knowledge.

The inductive approach refers to the way in which students introduce linguistic contexts, which include the rules for which these rules can be induced by context and practical examples. In other words, the sequence in this approach goes from creating a situation and giving examples to the generalizations of patterns which students should discover by themselves or with the teacher's help (Zohra, 2015, p. 32). Hendrikusm (2018) states that "it is an approach which favors pattern-recognition and problem-solving abilities which suggests that it is particularly suitable for learners who like this kind of challenge" (p.23).

Prince & Felder (2006) states that "inductive teaching methods occurs in different ways such as: discovery learning, inquiry-based learning, problem-based learning and project- based learning, case-based teaching, and just-in-time teaching" (p.12). Few studies have examined these methods as a group, providing a deep analysis addressed to the conceptual frameworks and research bases for methodology on teaching, checking applications of inductive methods in education, and the roles between the teacher and student, such as active and collaborative learning. The following paper provides a series of features of the main principal inductive methods, which illustrates applications in the sciences, with some common issues while it is implemented, and suggests resources for teachers who select this method as a way of teaching guide.

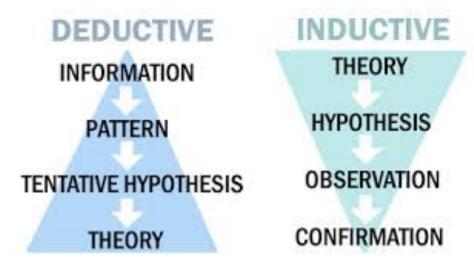


Figure 1. Deductive and Inductive Theory Source: Big Think (2015).

Inductive techniques of teaching take various forms, including discovery, inquirybased learning, problematic learning, case-based education, and just-in-time education. Few studies have examined these methods as a group. According to Prince and Felder (2007) provide an extensive analysis of the conceptual frameworks and research bases for inductive teaching, review applications of inductive methods in engineering education, and indicate the role of different ways to students in inductive learning, such as active and cooperative learning (p.14).

Castro et. al. (2016) mentions that "the inductive approach is the learner-centered, and the teacher is a model or facilitator that is, the students are active in their learning process and they can discover the rules by themselves or infer them. In general, this method is more encouraging and calls for the participation of more pupils. The study examines the distinctive characteristics of the main inductive methods, explains example uses in the sciences, addresses practical implementation concerns and offers resources for teachers that want to utilize one or more inductive methods in one's own teaching.

2.2.1.1.Inductive Paradigm

Inductive teaching and learning include various strategies including investigation, problem-based learning, project-based learning, case-based teaching, learning discovery and just-in-time education. These approaches have many common aspects, apart from being inductive. They are all student-centered (also student-centered) so that pupils are more responsible for their own learning than the traditional teacher-based method. All students are supported by research findings which they learn through incorporating new knowledge into existing cognitive structures, and it is doubtful that the material would have little apparent link with what they know and think. Joyce, Weil, and Calhoun (2015) indicate that "conceptual thinking is probably programmed into us during gestation. At birth, we immediately start to learn language . . . We study our environment and sort it out. We classify objects . . . as we try to gain control of our surrounding" (p. 35).

All of them can be described as constructivist approaches based on the widely known notion that students build up their own real versions instead of just absorbing the versions supplied by their teachers.

2.2.1.2. Inquiry Based Learning

Students will have a challenge (such as question-based learning, observation or data set to be interpreted or a hypothesis that must be tested) and achieve the desired learn in the process of responding to this challenge. A student who has to learn through inquiry or guided inquiry will have a challenge to respond. Guido (2017) looks at a student as well as a teacher's question. He describes how IBL focuses on studying an open issue or subject from a student perspective, while from a teacher's standpoint, research teaching focuses on transferring pupils into the fields of critical thinking and knowledge beyond simple curiosity.

Education Development Center (2016) affirms the following passage:

Inquiry-based learning is one of many terms used to describe educational approaches that are driven more by a learner's questions than by a teacher's lessons. It is inspired by what is sometimes called a constructivist approach to education, which posits that there are many ways of constructing meaning from the building blocks of knowledge and that imparting the skills of "how to learn" is more important than any particular information being presented. Not all inquiry-based learning is constructivist, nor are all constructivist approaches inquiry-based, but the two have similarities and grow from similar philosophies. (p. 1)

Not all survey-oriented learning or constructivist techniques are based on inquiry but both share parallels and are rooted in comparable concepts. Any teaching beginning with a challenge in respect of which technical qualities as inquiry-based learning for the required knowledge have not been provided and the scales of the inquiry may vary from a single lecture to a significant term project. In this respect, all inductive approaches are investigative versions, which differ in essence from the nature of the task and the type and level of support the teacher provides.

2.2.1.3. Problem-Based Learning

Howard Barrows at McMaster University in Canada initially advocated problembased learning. He intended to design a strategy that enabled his students to think on genuine daily challenges (Delisle, 1997). The problems of theoretical and conceptual learning were predicated on two ideas. One of them is the work of education philosopher John Dewey, who emphasized that learning via experience is important. Dewey says that students identify an issue in a real-life experience, which stimulates their thinking, collect material that can provide provisional solutions to the problem and use those ideas to help them validate their knowledge.

PBL encompasses the sociocultural theory of Vigotsky, which highlights the need of student engagement in cognitive learning communities in which the student exchanges ideas and compares ideas with each other, interacts actively to solve issues (Eggen & Kauchak, 2015). Moallen et al. (2019) states that "in PBL students are expected to spend the majority of their time studying on their own or with their classmates rather than under the instruction of a teacher" (p. 4). This means that there should be limited usage of lectures and guaranteed access to quality learning resources.`

PBL targets a wide variety of aspects both cognitive and affective, with research showing that PBL students are more motivated and deeply engaged in learning and problem solving. Problem-based learning is arguably the most dispersed cult of all inductive instructional approaches to be applied. It takes time to construct authentic openended problems whose solution involves the full range of skills listed in the learning goals of the teacher, so that instructors are encouraged to use problems that have already been developed and tested

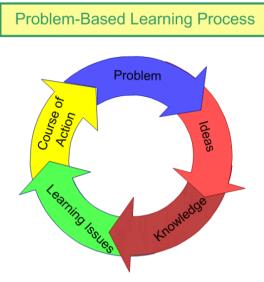


Figure 2. Problem- Based Learning Process Source: (Steirman, 2010).

2.2.1.4. Features of Problem-Based Learning

The Hun School of Princeton (2020) mentions "as a student-centered approach, problem-based learning pushes kids to take initiative and responsibility for their own learning". They develop talents which aid maturity since they are urged to employ inquiry and creativity. The capabilities developed by students do not only include one classroom or topic. They can apply to a host of educational disciplines and beyond, from leadership to the resolution of genuine challenges in the world.

The reward is far larger than an A for a job in problem-based learning projects. Students are respected and pleased by understanding that a mystery has been answered, an innovative solution devised or a real product produced. The teacher plays a vital role in helping the student to become self-directed learners and must create an environment in the classroom, in which the students get systematic training in conceptual, strategic and reflecting thinking within a discipline in which later research is ultimately more successful.

According to Sarq et al. (2020) groupwork is also an essential aspect of PBL for several reasons. Moreover, it is the second major feature of PBL is collaborative learning. By working in small groups, students should actively communicate, share information and past knowledge, take joint decisions, negotiate roles, and evaluate and adapt learning methodologies and group work via interactive discourse. Finally, according to Cohen (1994) groupwork makes students engaging and motivated since they participate actively in the work and are accountable to group members for their actions.

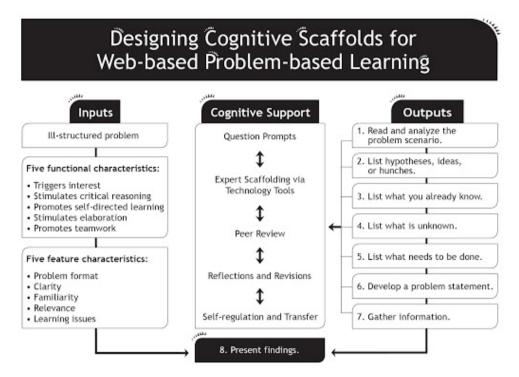


Figure 3. Design of a common Problem-based scenario Source: Potmesil, M (2019).

2.2.1.5. Problem-Based Learning Objective

The objective of the PBL prepare is to make strikes on critical thinking skills through issue fathoming and basic considering among understudies. Learners have a problem and are trying to solve it with information that they already have, so that they can understand what they know. They identify what they should learn and how to tackle the problem. Having worked as far as feasible with the problem and determined what to learn, students conduct themselves to explore information and use a range of information resources (books, journals, reports, online information, and a variety of people with appropriate areas of expertise). This enables learning to be tailored to the individual's needs and learning styles.

The students return to the problem and use what they have learned to handle the problem to get a better understanding of it and solve it. After completing their problem work, students evaluate each other to build self-appreciation skills and to evaluate their classmates in a constructive way.

According to Ghani et al. (2021) The PBL approach helps students, which plan, monitor, and assess their own learning, to become lifelong learners, to become self-driven learners. The contextualized method of collaborative learning also encourages interaction between students who share comparable obligations to achieve common objectives that are relevant to the learning setting. By exchanging thoughts, the students will have a better comprehension of the subject and offer feedback during the study session.

In order to solve the challenge, students decide on the alternatives they have identified. They develop the ability to think critically. Alfaro & Lefevre (2017) states the following "a judgment based on the analysis, evaluation and inference drawn from the evidence, and also develop the ability to explain the reasoning process upon which their critical judgment is based". (p. 21)

2.2.1.6.Discovery Learning

According to Jerome Bruner (1963) he derived discovery learning from contemporary cognitive psychology studies and encouraged the creation of more precise ways of education. Furthermore, the most significant feature of discovery study is that learners must build abstract knowledge units and structures (such as concepts and rules) through their own inductive reasoning of non-abstracted learning resources.

The discovery learning mode requires that the student participates in making many of the decisions about what, how, and when something is to be learned and even plays a major role in making such decisions. Instead of being 'told' the content by the teacher, it is expected that the student will have to explore examples and from them 'discover' the principles or concepts, which are to be learned. (Ilmu, 2016, p. 293)

In the case of common concepts, common approaches and methods (for example, an educational strategy or a mode of authorities), undesirable issues and other types of problems (for example, how underwriting is to be persuaded in a separate course), or questions that are causally clarified by the learners, the educational material can include (e.g., why a fluid changes the colour).

The total of direction inside the induction forms of the learner is another trait. In the field of revelation learning, the stated level of direction can change adaptively and depend on the learning fabric's problems, the complexity of the conceptual and procedural knowledge expected and the cognitive or motivational requirements of students. This is why the learning environment's amount of direction or structuredness is not fixed, but speaks to a changing, non-defining quality of the learning of information.

Apriyanti (2019) proposes that in the learning process, the function of the instructor is not merely separated by the discovery study model, the teacher still has to lead students to find a concept to produce results that do not match the aims. It is just

necessary to limit the assistance given by teachers, so that learners have the possibility to become scientists by independently finding knowledge, concepts or topics. From the teaching point of view, the correct supervision for teachers will allow students to learn activity and generalize norms and to feel satisfied. Therefore, a strong drive to study will be found and the learning will not always be readily forgotten. In particular, it does not give the teacher ready solutions, but rather encourages students to study psychology and to combine their own thinking characteristics and experiences to make their self-discovery and knowledge mastery and to construct the migration (Wang, 2016).

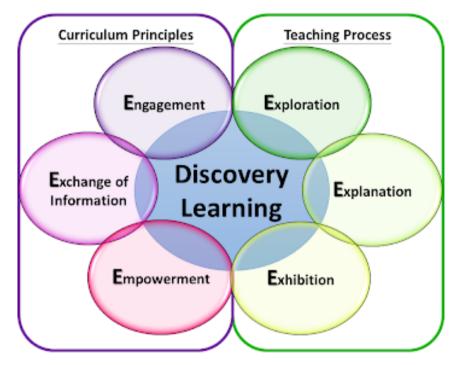


Figure 4. Discovery Learning Source: TWGHs (2017).

2.2.1.7.Discovery Learning (Learning by Examples)

Discovery pursuit of teaching includes: first, create specific topic scenarios in which students encounter interesting problems; second, dividing the topic into a number of doubts which should be responded to in order to stimulate their spirit of enquiry. third, encourage their creativity and encourage students to assume innovative responses. Finally, teachers sum up what has been debated and resolved by students.

The discovery learning model stresses the importance of understanding the structure and/or essential ideas in a scientific field through the participation of students in the process of learning. Discovery learning model is a paradigm for improving the way active children learn by finding out and exploring themselves, and so the result is lasting and unforgettable in their minds. The method of discovery learning implies that the

student takes part in making numerous decisions concerning what, how and when to study, and even takes an important role in making such decisions. Instead of being "told" by the teacher, the student is expected to examine examples and "find" from them the principles or concepts that are to be learned.

Inventionland institute (2018) suggests that the method of discovery learning is distinctive in how challenges are presented. Teachers will provide pupils with an issue and resources to tackle that challenge. This premise alone differs greatly from normal scientific investigations as you grew up. Most scientific teachers would offer experimental instructions, conduct experiments, exhibit the results and then grade the students on their experiment writing. There is little discovery when pupils view each process and the desired result before they try it themselves. Students just perform a job that someone else has watched.

Discovery learning can be described as a dynamic learning, because dynamic learning approach integrates a reason for free and inventive development in examination, so that undergraduate studies might expand. Learn point is confidence in building understudies that enable an idea by exploring it. Inquire about demonstrate that composing around science makes strides not as it were science lexicon, but moreover execution in perusing and considering within the discipline

2.2.1.8.Project-based learning and hybrid (problem/project-based) methods

"Project-Based Learning is an individual or group activity that goes on over a period of time, resulting in a product, presentation, or performance" (Donnelly & Fitzmaurice, 2018, p. 3). It usually has a time schedule and milestones as the project advances and various forms of formative assessment.

Problem-oriented learning is a program as well as a method. The curriculum comprises of carefully selected and created tasks which require critical information acquisition, problem-solving expertise, self-oriented learning methodologies, and team involvement. The procedure replicates the regularly utilized systemic strategy to solve or meet life and career obstacles.

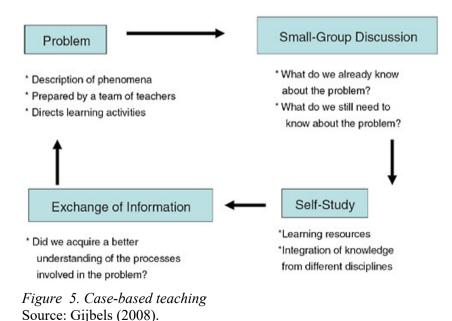
Project-based learning comprises assignments that enable students to develop process or product design, computer code or simulation, or experimental designs. The culmination of the project is usually a written or spoken report which outlines what has been done and what has been achieved. There was not much evidence on the inclusion of project-based learning in science curricula, while some of the applications described in this study paper might also be deemed project-based.

Teachers deal more and more with children who have a wide range of skills, come from different cultural and ethical backgrounds and learn English. Schools are looking for solutions to meet these pupils' needs. One strategy to incorporate a greater range of learning possibilities in the schoolroom is to give project-based instruction. It can involve children from many cultural backgrounds, because children can choose topics linked to their own experiences and employ ethnic or unique techniques of learning

2.2.1.9.Case-based teaching

MGH Institute of Health Professions (2021) affirms that the presented pedagogical technique involves students in making real-world decisions on case-based teaching. To encourage students to use knowledge learned from school or by additional research to help solve the issue, you construct examples that mimic genuine working conditions. Case-based education allows you to test students' abilities to synthesize, evaluate and implement courses during the authentic problem-solving process.

Cases that are clear and acceptable and incorporate all the educational aspects that teachers seek to transmit are the key to the case-based instruction. It can be quite timeconsuming to build such situations. Using case-based training can therefore be regarded as intermediate in difficulty, if reasonable pre-written case studies are available (usually comparable to project-based learning). comparable to project-based learning).



For learners, case studies are especially helpful since, in order to come up with a solution to a case study, students must employ language skills in combination with analytical and/or interpersonal abilities — the kind of situation that can happen outside of a classroom in "real" life. Case studies allow teachers to use the communication approach: the core focus is on executing a job and students use language to communicate their thoughts instead of practicing a grammar or lexicon. Roell (2019) states the following;

Case studies can be tailored to different language levels and teaching situations, such as English for specific purposes (ESP) or content-based learning (language acquisition combined with the study of a subject matter).

Language students will need. High-context cases are therefore suitable for learners who have sufficient proficiency in English and specialized knowledge about the subject; this is the case for many ESP students studying business, engineering, or other subjects. If teachers want to create their own subject- specific case studies, they may consider the possibility of collaborating with a specialist subject teacher. (p. 25)

The objectives of the strategy include the creation of fundamental skills for the purpose of assessment, learning through decision-making and role-playing conditions, the development of certainty in the identification, confrontation, analysis and understanding of issues through intuitive discussions.

2.2.1.10. Just in Time Teaching

In a two-stage series of learning activities, just-in-time education actively incorporates students in the training process. In the first step, the students do a number of activities outside the classroom and submit their work to the instructor (typically using interactive web documents). In the second step, the trainer gathers the answers of the students (frequently just hours before the next lecture) so that students can receive detailed feedback in time on the subjects and identify the areas of knowledge and confusion for the following session.

In combination with the preparatory material tested in online quizzes, Just-in-time teaching (JiTT) allows students to post questions online to clarify aspects they do not understand; (ii) Peer Teaching is used during the interactive session and enables students

to create knowledge in discussion with their peers and to actively participate in the subject under study.

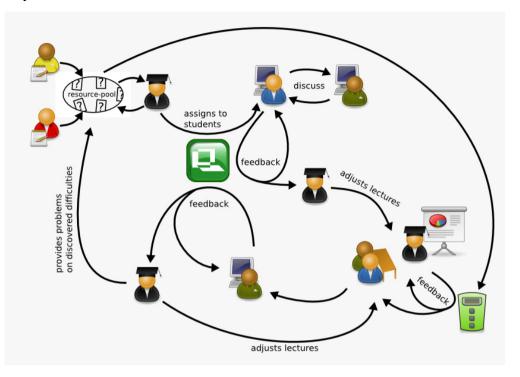


Figure 6. Just in Time Teaching Source: University of Nebraska (2016).

According to Teaching Entry Level Geoscience (2021) suggests that the focus of just-in-time teaching is on better learning for students through the use of brief web-based questions (JiTT exercises) before classes. The instructor reviews student replies to JiTT exercises a few hours before class and is used to construct teaching activities to address learning lacunes found in the JiTT answers. The JiTT exercises enable instructor to swiftly acquire information on student comprehension of course concepts just before a class meeting.

One of the important factors for the successful implementation of JiTT is the development of an effective collection of questions that students will answer before the next school online. JiTT questions are usually open and ask those students read a chapter or a textbook article, evaluate a video, complete a simulation or analyze data, do something related to content to be tackled in the following session. For each JiTT exercise, the teachers ask JiTT questions and students answer online a few hours before the session.

2.2.2. Universal Grammar

The notion of universal grammar studies the language in different ways. It explains that a language is regulated by certain regulations such as: asking a question or turning into a negative thing. A language also has its own gender of identification and develops activities to be conveyed today or in the past. A youngster must follow a set of specific guidelines to lay down the foundation of a mother tongue.

During the 60s, linguists continued studying grammar or language laws in a new theory. A US-based linguist expert named Noam Chomsky often concentrated on the merciless learning of young children in languages. Theory received attention. The essential language structures are already encrypted in the human brain at birth, according to Chomsky's view.

To be legitimate, these structural qualities must be shared by all languages of the world in order to maintain Chomsky's hypothesis. And indeed, Chomsky and other generative languages such as him have proved that 5,000 to 6,000 languages worldwide share a collection of syntactic rules and principles despite their highly diverse grammars. These linguists claim to be innate and to be anchored in the neural circuits of the human brain.

2.2.3. Chomsky Observations

After Chomsky's development of his theory of universal grammar in the 1960s, the empiricist school that had dominated thinking about language since the Enlightenment held that when children came into the world, their minds were like a blank slate. In this previously quiet, undisturbed pond of empiricism, Chomsky's theory had the effect of tossing a big rock. Subsequent studies in cognitive science, which combined the techniques of psychology, linguistics, computer science and philosophy, soon provided further support for the theory of universal grammar. For example, researchers found that babies only a couple of days old could distinguish the phonemes of any language and seemed to have an innate mechanism for interpreting the sounds of the human voice.

Thus, from birth, children would appear to have certain linguistic abilities that predispose them not only to acquire a complex language, but even to create one from whole cloth if the situation requires. One example of such a situation dates back to the time of plantations and slavery. On many plantations, the slaves came from many different places and so had different mother tongues. Therefore, they developed what are known as pidgin languages to communicate with one another. Pidgin languages are not languages in the true sense because they employ words so chaotically; there is tremendous variation in word order, and very little grammar. But these slaves' children, though exposed to these pidgins at the age when children normally acquire their first language, were not content to merely imitate them. Instead, the children spontaneously introduced grammatical complexity into their speech, thus in the space of one generation creating new languages, known as creoles.

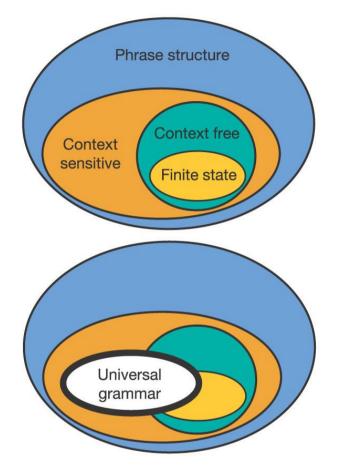


Figure 7. Universal Grammar Source: Socynema (2016).

A useful metaphor for explaining what Chomsky means by referring to universal grammar as "a system of limitations." One clear explanation. Before throwing the dice, the result would be that there are 2-12 numbers, but no one would wager that there are 3,143. Similarly, depending on the country in which a newborn child was born, he will speak any of a number of languages, but he will not talk to them in any way, as he likes:

he will adopt some favored, natural patterns. One way to define these structures is not to say what kids and newborns learn, but what happens to them.

Starting date	Model .	Key terms	Key book/article
1957	Transformational generative grammar (TG)	Rewrite rules Transformation Generative Kernel sentence	Chomsky, 1957
1965	Aspects, later Standard Theory	Competence/performance Deep/surface structure	Chomsky, 1965
c. 1970	Extended Standard Theory (EST)		Chomsky, 1970
1981	Government/Binding Theory (GB)	Principles Parameters D- and S-structure Movement	Chomsky, 1981a
post-1990	Minimalist Program (MP)	Computational system Interface conditions Perfection	Chomsky, 1993

Figure 8. Universal Grammar Generation Source: Socynema (2016).

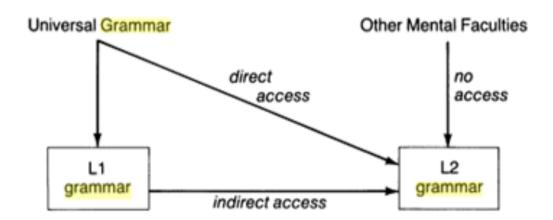


Figure 9. Universal Grammar Procedure Source: Universal Grammar and Second Language Acquisition (1989).

The Universal Grammar (UG) hypothesis—the idea that human languages, as superficially diverse as they are, share some fundamental similarities, and that these are attributable to innate principles unique to language: that deep down, there is only one human language (Chomsky, 2000a, p. 7)—has generated an enormous amount of interest in linguistics, psychology, philosophy, and other social and cognitive sciences. The predominant approach in linguistics for almost 50 years (Smith, 1999, p. 105: described it as "unassailable"), it is now coming under increasing criticism from a variety of sources. In this paper, I provide a critical assessment of the UG approach.

Chomsky (1986) sees UG as "an intricate and highly constrained structure" (p. 148) consisting of "various subsystems of principles" (p. 146). These include "X-bar theory, binding theory, Case theory, theta theory, bounding theory ... and so forth – each containing certain principles with a limited degree of parametric variation. In addition, there are certain overriding principles such as the projection principle, FI (full interpretation), and the principles of licensing... [UG also contains] certain concepts, such as the concept of domain ... and the related notions of c-command and government" (p. 102). However, every major development in the theory since then was accompanied by very substantial revisions to the list of proposed universals.

"To say that language is not innate is to say that there is no difference between my granddaughter, a rock and a rabbit. In other words, if you take a rock, a rabbit and my granddaughter and put them in a community where people are talking English, they'll all learn English. If people believe that, then they believe that language is not innate. If they believe that there is a difference between my granddaughter, a rabbit, and a rock, then they believe that language is innate." (Chomsky, 2000b, p. 50)

The ability to read and share intentions, including communicative intentions—i.e., theory of mind in the broad sense—is important for language for two reasons. First, it enables the language learner to understand what language is for: an animal that did not understand that other individuals have beliefs and intentions different from its own would have little use for language. Secondly, it provides the learner with a vital tool for learning language. In order to learn a language, one must acquire a set of form-meaning conventions; and to acquire these, learners must be able to guess at least some of the meanings conveyed by the utterances they hear.

2.2.4. The Naturalistic Approach to a language

The view that human language is a natural object is central to modern linguistic: our species-specific ability to learn a language and tacit understanding of the enormous complexity of language and our ability to use it freely, appropriately and without limitation is attributed to a natural world property, our brain. If you look at language studies, it is an empirical investigation that needs no defense. It follows, as in the study of biological sciences, that linguistics attempts at identifying the abstract characteristics of the biological object in human language and the organizational mechanisms of that object.

a. Colorless green ideas sleep furiously.

b. *Furiously sleep ideas green colorless.

Neither sentence has even a remote chance of being encountered in natural discourse, yet every speaker of English can perceive their differences: while they are both meaningless, (a) is grammatically well formed, whereas (b) is not. To understand what precisely this difference is is to give 'a rational account of this behavior, i.e., a theory of the speaker's linguistic intuition the goal of linguistic

2.2.5. Language Acquisition

Learning your native language at early ages, the linguistic competence development happens in different stages, from the sounding of one letter in order to express a word and then a sentence. Babbling one the first stages on the language production because at this point, infants produce sounds based on the input they acquire. One-word sentences are generally performed using monosyllables added with consonantvowel clusters. In the two-word stage, the use of morphological markers is not applied without tenses, and pronouns are hardly produced, but the intonation occurs with longterm utterances.

The notion of "infinite use" requires further analysis. In the light of insights of the formal sciences in the 20th century, we distinguish two senses of this notion, the first relating to competence, the second to performance. In the first sense, a language specifies an infinite range of symbolic objects, which we call structural descriptions (SDs). We may think of the language, then, as a finitely specified generative procedure (function) that enumerates an infinite set of SDs. Each SD, in turn, specifies the full array of phonetic, semantic, and syntactic properties of a particular linguistic expression. This sense of "infinite use" relates to Jones's linguistic competence: the generative procedure with its infinite scope.

2.2.6. Collaborative Learning

In the space of technology-enhanced learning, a number of recommender frameworks have been presented in arrange to propose learning assets to clients. Such frameworks might possibly play an imperative instructive part, considering the assortment of learning assets that are distributed online (Tzikopoulos et al. 2007) and the benefits of collaboration between mentors and learners (Recker & Wiley 2000, 2001; Nesbit et al. 2002; Kumar et al. 2005). Starting insights of relating collaborative channeling to instruction have showed up in early significant papers (Terveen et al. 1997; Chislenko 1998). In this area, we survey related writing on agent recommender frameworks for learning assets.

Another framework that has been proposed for the recommendation of learning assets is the Run the show- Applying Collaborative Sifting (RACOFI) Composer framework (Anderson et al. 2003; Lemire 2005; Lemire et al. 2005). RACOFI combines two proposal approaches by joining a collaborative sifting motor that works with appraisals that clients give for learning assets with deduction to run the show motor that' is mining affiliation rules between the learning assets and utilizing them for suggestion.

A distinctive approach to learning resources' recommendation has been taken after by Shen and Shen (2004). They have created a recommender framework for learning objects that is based on sequencing rules that offer assistance clients be guided through the concepts of a cosmology of themes. The rules are fired when holes within the competencies of the learners are distinguished, and after that fitting asset are proposed to the learners.

2.2.6.1.Benefits of Collaborative Learning

The benefits of conveying recommender frameworks for learning assets have been examined in a few later conceptual ponders. For illustration, there are two curiously papers proposing the utilize of a recommender to upgrade the revelation of learning assets. Downes (2004) recommended that multidimensional evaluations may way better reflect contrasts within the different quality viewpoints of learning assets and ought to be put away in user-provided metadata. The creator proposed to utilize the data put away in such metadata in arrange to prescribe assets to clients based both on their content-related data, as well as on multi- quality evaluations.

Collaborative sifting regularly offers common ground with social route (Munro et al. 1999; Farzan & Brusilovsky 2006, 2008), which may be too seen as a social

recommender approach. CoFIND by Dron et al. (2000a, b) is an illustration of such a framework that has been utilized in instruction. CoFIND extricated the client demonstrate and turned it interior out, making measurements of pedagogical metadata utilized for rating. Furthermore, Brusilovsky. (2005) utilized gather sifting within the Information Ocean, illustrating a related utilize of social forms for proposal in an open corpus environment with a few collaborative sifting characteristics. It may be moreover beneficial to specify related work in bunch sifting where suggestions are made for bunches instead of people, which can be imperative in conventional regulation learning communities such as classes (e.g. Masthoff 2005).

2.2.7. Digital Resources

"This term is used here to refer to materials included in the context of an online course that can enhance the learner's achievement of the described learning goals. "Digital Resources are electronic tools, systems, devices and technologies that generate, store or process data" (Varsat, A, 2016, p.10). Digital Resources facilitate digital learning which is define as any type of learning that is facilitated by technology or instructional practice that makes effective use of technology.

It can be definitely stated that in the 21st century "computer technology has revolutionized the fields of linguistic research (descriptive linguistics) and applied linguistics (language teaching and learning) with the advent of corpus linguistics" (Kamariah, 2017). Educators and researchers have applied technologies to assist language learning and instruction for many years. The use of technologies in the classroom context was found to be no less effective than traditional classroom learning.

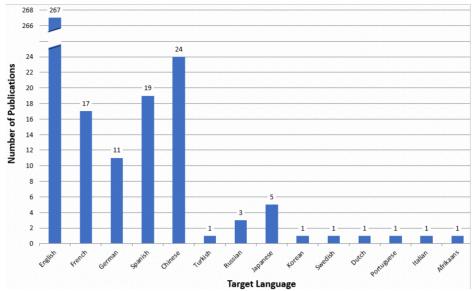


Figure 10. Target Language Source: Thienthong & Lian (2014).

• Adaptive Learning

Adaptive learning is part of a learning feature which aims to measure learners' comprehension and assess them in order to induct a new topic with many resources to find out horizons. This learning method works with a system combining feedback and cooperation from the learner which identifies strengths and weaknesses of another learner in order to adjust how the content is integrated. The feedback is one of the main characteristics for the adaptation, it contributes smooth learner's lessons considering the learner's comprehension and attention. Adaptive learning keeps the learner engaged along a whole lesson by presenting new material with tools.

• Badging and Gamification

Badging and gamification form part of digital induction which aims recognition on the learner and the target. It is based on rewards for achieving a certain level of difficulty within the content proposed and worked during a lesson. The collection of badges turns the process into a gamification process that helps to domain the basis of a concept or a rule.

• Mobile Learning

Mobile learning was a word for learning and development in numerous technological fields and platforms. Mobile learning addresses a multi-task method to learning through electronic devices, which in addition to multimedia apps provides both social and contextual interactions. Over the years, it has been very popular since the input enables students to participate in the learning process and achieve quick results wherever they choose.

• Virtual Reality

The learner can have an interaction of firsthand, because the learner has been part of the learning environment. Virtual reality learning environment (VRLE). It helps with a rich learning process inside a desktop or a head-mounted display adjacent technology (HMD). It is regarded to provide users with real-life experiences to produce a learning result and is intended as an objective if going to school or participating in the classroom is limited.

2.2.7.1. Digital Tools for learning English

• Cisco Webex

The application below is part of a collaborative, multimedia platform to create Webex meetings, Webex teams and Webex devices. This software is a web conference platform where individuals may participate in a live stream for educational reasons. Cisco Webex offers several functions like online meetings, file-sharing and colleague meetings. It is considered a leading platform for collaboration in the online field, improving the joining of new users to improve the app's knowledge.

• Zoom

Zoom is a multimedia conference service, known mostly for meeting and webinars. It enables users to exchange content and video conferencing capabilities from various devices. For instance, in a better atmosphere, English teachers bring together their pupils with digital assets such as videos, images, flashcards or files. Zoom has currently become a leading modern company with a simple, reliable cloud platform for video communication. Between its characteristics, the app allows English teachers to explore and assess the four skills through multimedia interaction and content sharing. In addition to screen sharing, Zoom motivates language production or giving the chance to teachers to make notes on their shared screen, provide lessons even more interactive. Learners and Teachers are also able to record the lesson for better understanding

In addition, English teachers can assess students' development by applying third party applications inside the online platform identifying strengths and weaknesses with feedback. Blaine (2019) expresses that many courses are taught at distance and are supported by full online instruction, where every interaction, synchronous or asynchronous, between instructors and students can take place on the Internet

• Genial.ly

Genial.ly is a multimedia design device, for example: as posters, infographics, quizzes and presentations to create interactive and dynamic visuals. Users may use pre-made templates or begin a new template with their preferences in order to design visuals. You can import your external slides and integrate them in the "Creations of Genius" if you are a premium member. This software has a major impact on learning since it allows students to communicate and to enhance their communication skills in concurrent work.

2.3. Conceptual Framework

Inductive: "It is the support and guidance provided to novice teachers and school administrators in the early stages of their careers. Induction encompasses orientation to the workplace, socialization, mentoring, and guidance through beginning teacher practice" (Alliance for Excellent Education, 2005).

Learning: "A deliberate action with a purpose to extract information, and then confirm the accuracy of that information through experience and use. Learning is the cognitive process of acquiring skill or knowledge. Learning is the process of acquiring new or modifying existing knowledge, behaviors, skills, values, or preferences. To get to know something or become aware of something" (Basic Knowledge 101, 2018).

Language Skill: "Skills relate to different aspects of using language, such as listening, reading, writing or speaking. Skills are our ability to do these things. They are usually divided into two types: receptive and productive" (Netlanguage , 2017).

Method: "A procedure or process for attaining an object: as. a systematic procedure, technique, or mode of inquiry employed by or proper to a particular discipline" (Merriam-Webster, 2018).

Linguistic Performance: "Linguistic performance is the ability to produce and comprehend sentences in a language". Since the publication of Noam Chomsky's Aspects of the Theory of Syntax in 1965 (Trevor, 2001).

Guideline: "A document or set of documents usually providing guidance for teachers and instructors on approaches and procedures for a successful planning and implementation of the curriculum at school, local or national level". (International Bureau of Education, 2016).

Prior Knowledge: It is the knowledge the learner already has before they meet new information. "A learner's understanding of a text can be improved by activating their prior knowledge before dealing with the text, and developing this habit is good learner training for them" (British Council, 2015).

Strategy: "Strategic learning based on constructivist perspectives: partially based on the notions of Cognitive Flexibility Theory which suggests that multiple cases and multiple goals within a case will promote successful learning" (Sprio, 1993).

Digital Resources: "A learning system based on formalized teaching but with the help of electronic resources is known as E-learning. While teaching can be based in or out of the classrooms, the use of computers and the Internet forms the major component of E-learning. E-learning can also be termed as a network enabled transfer of skills and knowledge, and the delivery of education is made to a large number of recipients at the same or different times" (Economic Times , 2019).

Educational Assignment: "An assignment is a piece of work that is assigned to the Irish students by their respective teachers as a part of their education in the form of coursework, Homework, dissertation, essay, etc" (Ireland Assignment , 2018).

2.4.Legal Framework

At the moment of developing the present research work, in relation to chapter two, several frameworks have been presented that have served as guidelines within the theoretical aspect; an exhaustive investigation of issues and sub-themes that emerge from both the independent variables and the dependent variable; and likewise, the conceptual framework; a list of important words treated in the present investigation each with respective definitions for a broad understanding of legal framework.

In this section, some articles belonging to the regulations and regulations will be mentioned, which corresponds to the Ecuadorian legal scope. These legal articles have been selected for relevance and relation to the topics of study of the present investigation. The laws have been considered relevant to mention are: the constitution of the republic of Ecuador, the organic law of intercultural education and the code of childhood, all the mentioned regulations are in force and linked to the main topics on which the research is based on the present written work.

Conforme a lo estipulado en la Constitución De La República Del Ecuador, Decreto Legislativo 0, Registro Oficial 449 del 20 de Octubre del 2008, y la actualización de datos realizados el : 13 de Julio del 2011, y de Estatus actual: Vigente.

Artículo 26: " La educación es un derecho de todas las personas a lo largo de su vida y un deber ineludible e inexcusable del Estado Constituye un área prioritaria de la política pública y de la inversión estatal garantía de la igualdad e inclusión social y condición indispensable para el buen vivir las personas las familias y la sociedad tienen el derecho y la responsabilidad de participar en el proceso educativo" (Asamblea Nacional Constituyente de Ecuador, 2008).

Art. 347 de la Constitución de la República, establece que será responsabilidad del Estado:

 Incorporar las tecnologías de la información y comunicación en el proceso educativo y propiciar el enlace de la enseñanza con las actividades productivas o sociales. (Asamblea Nacional, 2011)

This article has been taken into consideration since this research project relates to the incorporation of technological resources in the educational process, in this specific case audiovisual resources to foster the development of speaking and listening skills. It is

important that teachers include these powerful technological tools since they can facilitate the teaching and learning processes in a better way.

Ley Orgánica de Educación Intercultural

Art. 2.- Principios. - La actividad educativa se desarrolla atendiendo a los siguientes principios generales, que son los fundamentos filosóficos, conceptuales y constitucionales que sustentan, definen y rigen las decisiones y actividades en el ámbito educativo (Asamblea Nacional, 2015)

F. Desarrollo de procesos. - Los niveles educativos deben adecuarse a ciclos de vida de las personas, a su desarrollo cognitivo, afectivo y psicomotriz, capacidades, ámbito cultural y lingüístico, sus necesidades y las del país, atendiendo de manera particular la igualdad real de grupos poblacionales históricamente excluidos o cuyas desventajas se mantienen vigentes, como son las personas y grupos de atención prioritaria previstos en la Constitución de la Republica. This literal makes reference to the development of the processes in the educational systems. The processes must be in accordance with the capacities of the students. It is notable to observe students with difficulties in their learning

h. Interaprendizaje y multiaprendizaje. - Se considera al interaprendizaje y multiaprendizaje como instrumentos para potenciar las capacidades humanas por medio de la cultura, el deporte, el acceso a la información y sus tecnologías, la comunicación y el conocimiento, para alcanzar niveles de desarrollo personal y colectivo...

Art. 6.- Obligaciones. - La principal obligación del Estado es el cumplimiento pleno, permanente y progresivo de los derechos y garantías constitucionales en materia educativa, y de los principios y fines establecidos en esta Ley.

j. Garantizar la alfabetización digital y el uso de las tecnologías de la información y comunicación en el proceso educativo, y propiciar el enlace de la enseñanza con las actividades productivas o sociales.

Art. 29.- Nivel distrital intercultural y bilingüe. - Los distritos educativos interculturales y bilingües ejecutan los acuerdos entre prestadores de servicios públicos que optimicen en su respectiva jurisdicción la utilización de los servicios públicos complementarios al servicio educativo, tales como: infraestructura deportiva, servicios de salud, gestión cultural, acceso a tecnología, informática y comunicación y otros.

Acuerdo Ministerial 0052-14

Artículo 6. DISPONER que los colegios autorizados a ofertar los programas de Bachillerato Internacional: el Programa de Escuelas Primarias-PEP y el Programa de Años Intermedios-PAI se regirán por el Acuerdo Ministerial 0224-13 del 16 de julio de 2013, en cuanto a las adaptaciones de la malla curricular nacional que deberán presentar al Viceministerio de Educación para su aprobación.

CHAPTER III

METHODOLOGICAL FRAMEWORK

3.1. Methodology

The presented research is developed through the inductive technique, it allows readers and researchers to find out the information and draw conclusions about the aim of this paper. Research instruments were implemented for determining the importance of digital tools in 2nd language acquisition. According to Signer (1991), Descriptive research such as the mean, median, mode, deviation from the mean, variance, percentage, and correlation between variables are presented in descriptive research.

3.2.Type of Research

Descriptive research involves identification of attributes of a particular phenomenon based on an observational basis. (Creswell, 2002). It will provide a portrayal of characteristics with the group being studied regarding to the response to the different digital activities in order to induct learners for the production of language skills of 3rd grade students at Unidad Educativa Apostol Santiago.

3.3.Research Approach

It will measure the different skills that the group of students present through the I Term of the new scholastic year, compared from the results of last year's in English learning. Qualitative research is a holistic approach that involves discovery. Qualitative research is also described as an unfolding model that occurs in a natural setting that enables the researcher to develop a level of detail from high involvement in the actual experiences (Cresswell, 1994). Qualitative research builds its premises on inductive, rather than deductive reasoning. It is from the observational elements that pose questions that the researcher attempts to explain. The strong correlation between the observer and the data is a marked difference from quantitative research, where the researcher is strictly outside of the phenomena being investigated.

It will measure (with the use of graphs) the scores obtained in the different partials as same contrasted with last years. Quantitative characterizes the world or a phenomenon by identifying patterns in data to answer questions about who, what, where, when, and to what extent. Descriptive analysis is data simplification. Good description presents what we know about capacities, needs, methods, practices, policies, populations, and settings in a manner that is relevant to a specific research or policy question. Thus, data alone are not descriptive research, because data are not purposeful: data dumps, all-purpose data dashboards, and generic tables of summary statistics may be useful for some purposes, but they do not qualify as descriptive analysis. (Loeb, y otros, 2017).

3.4. Research methods

3.4.1. Class Observation

The observation of the following research is a technique that will identify the effect of how digital resources and resources are conducted in a class, the parameters that the head teacher is giving as objectives and the way and reasons how can technologically tools influence on the production of language skills. The tool for the class observation will consist of the content of the observation guide which addressed the manner the class is managed by the teacher, the applications and sources are applied, the condition of the content, how much of the students' first language is used in class, how students address each other when doing tasks in English.

Observation is the systematic description of the events, behaviors, and artifacts of a social setting (Marshall & Rossman, 1989, p. 79). Observation is utilized within the social sciences as a strategy for collecting information almost individuals, forms, and societies. Perception, especially member perception, has been the trademark of much of the inquire about conducted in anthropological and sociological studies and may be a normal methodological approach of ethnography. It is additionally an instrument utilized frequently to gather information by educator analysts in their classrooms, by social specialists in community settings, and by analysts recording human conduct.

Observation may be a complex investigate strategy since it regularly requires the analyst to play a number of parts and to utilize a number of strategies, counting her/his five faculties, to gather information. In expansion, in spite of the level of inclusion with the think about bunch, the analyst must continuously remember her/his essential part as an analyst and stay segregated sufficient to gather and analyze information important to the issue beneath examination.

3.4.2. Survey

Kraemer (1991) identified three distinguishing characteristics of survey research (p. xiii). First, survey research is used to quantitatively describe specific aspects of a given population. These aspects often involve examining the relationships among variables. Second, the data required for survey research are collected from people and are, therefore, subjective. Finally, survey research uses a selected portion of the population from which the findings can later be generalized back to the population.

In survey research, independent and dependent variables are used to define the scope of study but cannot be explicitly controlled by the researcher. Before conducting the survey, the researcher must predicate a model that identifies the expected relationships among these variables. The survey is then constructed to test this model against observations of the phenomena.

The survey is a technique that addresses students with a variety of questions about the independent, the dependent variables and the proposal upcoming. The present study included the survey's technique and consisted of questions addressed to students' background and management of L2 language.

3.4.3. Interviews

The interview addresses to the teacher and includes a variety of 10 questions about the type of tasks students do in class, the content for the whole year or manual that is used with the students including the amount tasks in function with the 4 language skills. The results of how the teacher will use all the data needed to reach concrete conclusions for the preliminary stage.

3.5. Research Population and Sample

Table 1. Population and Sample

STAFF				
MEMBER				
INCLUDED	POPULATION	SAMPLE	PERCENTAGE	OBSERVATION
IN THE				
STUDY				
Students	43	43	100	Aleatory
				observation
Teacher	1	1	100	Aleatory
				observation

Source: Unidad Educativa Particular Apostol Santiago Elaborated by: Valencia & Villacis (2021)

3.6.Results / Findings and Analysis

In the current analysis of the present research, it was structured by the observation technique followed by its tool the observation guide to distinguish students' opinions, likes and difficulties they have faced and what they would like to see more often concerning with technology within induction for the development of language's skills in 3rd Grade students from Unidad Educativa Particular Apóstol Santiago. The items on this format include a binary scale from 1 to 4 (not agree, in process, agree, totally agree) to evaluate findings which is a common characteristic of qualitative research.

Moreover, an interview was set and its instrument, the interview questionnaire, was addressed to 3rd Grade's teacher which is aimed to analyze and know more about teaching strategies and methodology applied in the present times with the use of digital resources helping on the development on language's skills. The questionnaire included 4 open-ended questions.

Finally, the survey technique was applied with a series of 8 questions applied to students to describe the common aspects behind applications and digital resources in the induction. The following applied a standardized questioning procedure. The survey questionnaire included 10 items and considered some parameters.

3.6.1. Students' Observation

The observation guide was applied to 3rd Grade students, to identify the most common difficulties in reading fluency they have. This tool includes 10 items regarding common reading features that are considered essential for fluency. The perceptions obtained from the observations are discussed below.

Table 2. Students' Observation

Students' Observation

	ITEM		BER OF DENTS
		YES	NO
١.	Make use of e-books or online information		
	sources to provide the content	18	25
2.	The presented content is developed through		
	slides or any different media (pictures,	40	3
	video)	40	5
3.	Introduce and present cooperative working		
	between the students	30	13
ŀ.	Assess students through the activities		
	proposed in the platform	32	11
5.	Students can perform easily after the		
	content presentation	16	27
<i>.</i>	Teacher does not completely domain the		
	management of applications and mobile	23	20
	devices	25	20
7.	Teacher is aware on the guidance with		
	students with the applications	25	18

8. Teacher incorporates extra-tools (web-ages) for undertaking new content	26	17
9. Teacher shows empathy with students' difficulties during sessions	20	23
10. Teacher demonstrates examples and make practice with students continuously	21	22

Elaborated by: Valencia & Villacis (2021)

Analysis

- Among the most important difficulties that students presented during the reading observation, there are three that got high negative rates. Furthermore, it was observed that most of students did not feel comfortable or did not receive enough resources to handle the presented issue. Analyzing students' opinions about the teacher, it seems that there are difficulties and issues with technology incorporation between online classes, it happens because teachers are not sufficiently prepared to run a class in this way, limiting students learning.
- Some other difficulties that were presented in students were the lack of language domain which was not smooth and limitation within apps and devices. It means children were not able to handle activities inside a computer. In addition, students struggled to perform immediately in a session. In the same way, the teacher. It is commonly caused by demotivation and background knowledge, usually because students are fear of making mistakes and use apps.

3.6.2. Students Survey

A survey questionnaire was applied to students or representatives of 3rd-year students at Unidad Educativa Apóstol Santiago, to collect information to describe the common aspects in language skills that students follow at home. The survey results were the following:

ITEM	SCALE	FREQUENCY	PERCENTAGE
¿Which of the	Mobiles Devices	18	42%
following elements	Computers or	16	37%
do you use the	Laptops		
most in class?	Books	21	21%
TOTAL		43	100%

Elaborated by: Valencia & Villacis (2021)

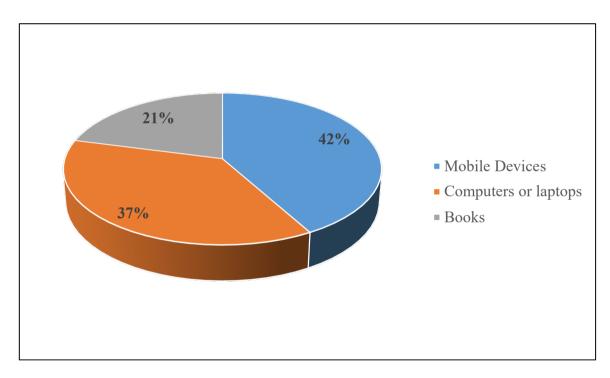


Figure 11. Students' tools in class Source: Unidad Educativa Apóstol Santiago Elaborated by: Valencia & Villacis (2021).

Analysis

The results have shown that the thirty two percent of the students uses mobile devices in classes. Then a few parts of them have stated that they work with their computers and the less part of students tend to use books. It seems that most of students are really use to work with technology, but nevertheless most of them do not know how to use it effectively.

Table 4. Does the teacher develop interactive activities through applications from the web?

ITEM	SCALE	FREQUENCY	PERCENTAGE
Does the teacher	Totally Agree	28	65%
develop interactive	Almost Agree	10	23%
activities through	Do Not Agree	5	12%
applications from			
the web?			
TOTAL		43	100%

Elaborated by: Valencia & Villacis (2021)

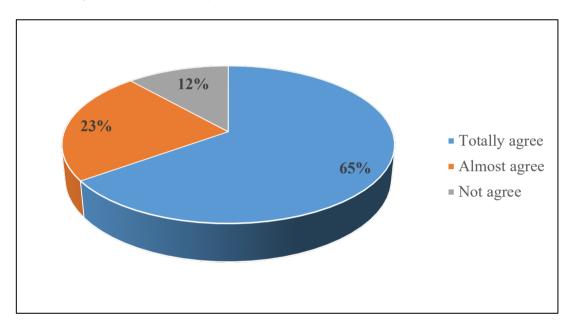


Figure 12. Acitivities interaction Source: Unidad Educativa Apóstol Santiago Elaborated by: Valencia & Villacis (2021).

Analysis

The 65% of the students were asked and agrees that the teacher develops interactive activities through applications from the web and online areas, while the 23% of them are not totally sure about the application of online activities creating limitations in the language process and induction. Moreover, the lowest part of the learners (23%) surveyed affirmed that they have not been part of any kind of online activity during the lesson.

Table 5. Does the teacher introduce a series of activities during the classes in the week?

ITEM	SCALE	FREQUENCY	PERCENTAGE
Does the teacher	Totally Agree	10	23%
introduce a series	Almost Agree	20	47%
of activities during	Do Not Agree	13	30%
the classes in the			
week?			
TOTAL		43	100%

Elaborated by: Valencia & Villacis (2021)

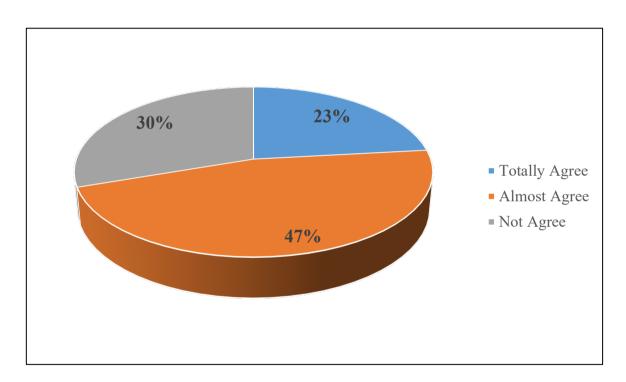


Figure 13. Activities in the class Source: Unidad Educativa Apóstol Santiago Elaborated by: Valencia & Villacis (2021)

Analysis

The 47% of the students agrees that the teacher introduces the lesson with objectives, while the 30% of them still have doubts if they have noticed it in classes and finally 23% percent stated not to be agreed about it.

Table 6. Are the objectives from the class announced?

ITEM	SCALE	FREQUENCY	PERCENTAGE
Are the objectives	Totally Agree	15	35%
from the class	Almost Agree	20	47%
announced?	Do Not Agree	8	19%
TOTAL		43	100%

Elaborated by: Valencia & Villacis (2021)

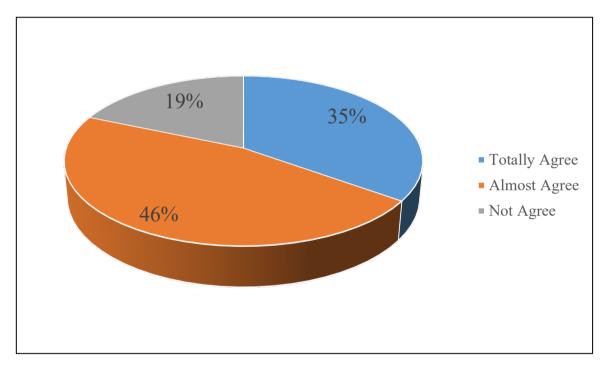


Figure 14. Objectives from the class Source: Unidad Educativa Apóstol Santiago Elaborated by: Valencia & Villacis (2021)

Analysis

The 46% of the students agrees that the teacher introduces the lesson with objectives, while the 35% of them still have doubts if they have noticed it in classes and finally 19% percent stated not to be agreed about it.

Table	7	Would	vou	agree f	0	continue	teach	ning	Eng	lish	onlin	ne?
raute	1.	would	you	agree	υ	commuc	icaci	inng	Eng	11511	omm	IC:

ITEM	SCALE	FREQUENCY	PERCENTAGE
Would you agree	Yes	36	84%
to continue	No	7	16%
teaching English			
online?			

101AL 43 100%	TOTAL		100%
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Elaborated by: Valencia & Villacis (2021)

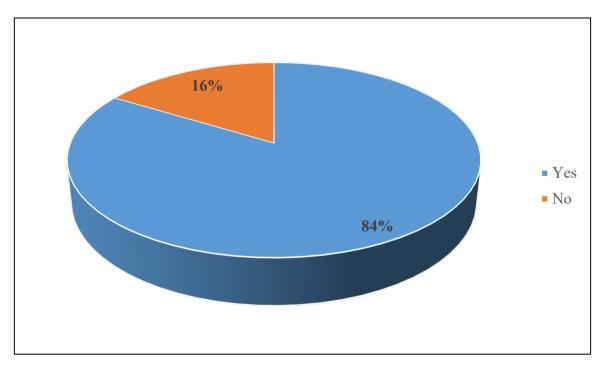


Figure 15. Online English acceptation Source: Unidad Educativa Apóstol Santiago Elaborated by: Valencia & Villacis (2021)

Analysis

The majority of students established to continue this new era, while the 16% said not to follow this way and stay in this modality.

ITEM	SCALE	FREQUENCY	PERCENTAGE
Which language	Speaking	14	33%
skills does the	Writing	5	12%
teacher practice the	Listening	15	35%
most?	Reading	9	21%
τοται		43	1000/
TOTAL		43	100%

Table 8. Which language skills does the teacher practice the most?

Elaborated by: Valencia & Villacis (2021)

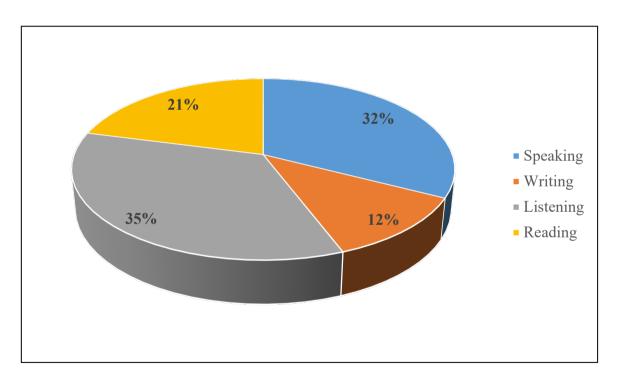


Figure 16. Language Skills Source: Unidad Educativa Apóstol Santiago Elaborated by: Valencia & Villacis (2021).

Analysis

The 35% of students surveyed established the teacher works the most with listening, while the 32% of them said that speaking. The other part selected between writing and reading.

Table 9. Do you consider that teacher has domain to the digital scene?

ITEM	SCALE	FREQUENCY	PERCENTAGE
Do you consider	Yes	22	51%
that teacher has	No	21	49%
domain to the			
digital scene?			
TOTAL		43	100%

Elaborated by: Valencia & Villacis (2021)

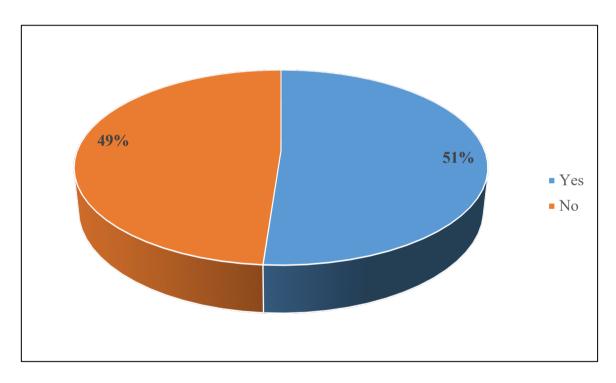


Figure 17. Teacher's performance Source: Unidad Educativa Apóstol Santiago Elaborated by: Valencia & Villacis (2021).

Analysis

Most of the students (51%) surveyed answered that the teacher has domain in the digital scene, while the other part (49%) was not sure about if the teacher can handle the recent era within technology. Students are aware the digital education has turned on due to the epidemic issue.

Table 10. During the presentation stage, does the teacher use previous knowledge?

ITEM	SCALE	FREQUENCY	PERCENTAGE
During the	Totally Agree	16	37%
presentation stage,	Almost Agree	14	33%
does the teacher	Not Agree	13	30%
use previous			
knowledge?			
TOTAI		10	1000/

TOTAL	43	100%	

Elaborated by: Valencia & Villacis (2021)

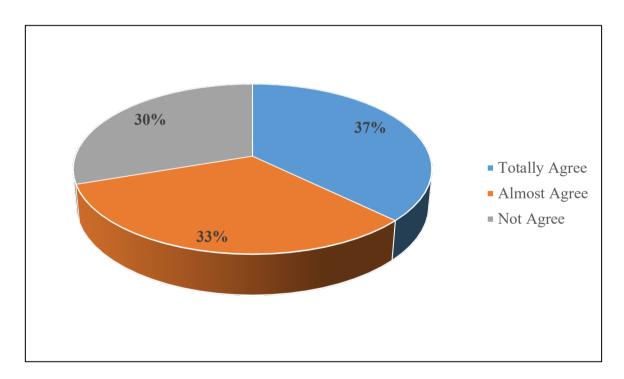


Figure 18. Teacher's capacity Source: Unidad Educativa Apóstol Santiago Elaborated by: Valencia & Villacis (2021).

Analysis

The 37% of the students agrees that the teacher introduces the lesson with previous knowledge for induction, while the 33% of them still have doubts if they have noticed it in classes and finally 30% percent stated not to be agreed about it.

3.6.3. Teacher Interview

The interview technique, and its instrument, the open-ended questionnaire, was applied to the teacher of 3rd Grade at Unidad Educativa Particular Apóstol Santiago. The purpose was to collect information from teachers to determine the importance of reading fluency in students. The interview questionnaire included 5 questions and the results were the following:

QUESTIONS	TEACHER
How important is your opinion about the application of technology resources in education? What actions are you taking for helping	I think it is important because interaction occurs within students across applications because there are many directions to go through such as: videos or pictures. Kids can learn naturally from near machines. In this case, I adapt my lesson with recorded
struggling learners with technology resources?	videos from myself as I guide, they can watch afterwards, in the same way I personalize the content into pdfs
What strategies are involved into a digital session?	I try to focus with a Natural approach-based class so they can associate with family as they are at home and mobile devices part of diary use.
How is the institution supporting you as a teacher with the present times?	During the school year, the principal organizes workshops with different companies to know and dominate resources that are implied. With the ease of the book, there is a platform where I can assess learners.
What is the best way you can induct students to a new content?	One of the most applied form I have used is from playing games, singing songs and dancing.

Table	11.	Teachers'	Interview
-------	-----	-----------	-----------

Source: Unidad Educativa Apóstol Santiago

Elaborated by: Valencia & Villacis (2021).

Analysis

- Teacher considers technology to be a new challenge and an inductive way for innovation because it handles different conditions and directions to go further specially in consideration with the internet. Despite of not being in a classroom anymore, the teacher considers those digital tools as a way to learn naturally associating their knowledge with their surroundings.
- Furthermore, the teacher thinks the new modality can be adaptable because not all of the students do not have the opportunity to enter a session in each lesson. In this way, the teacher affirmed to adapt the lesson by recording and making videos for everyone, so they can receive a lesson and watch in any time they want and continue the process.
- In that way, the institution has taken actions to help and support teachers to use more resources in the classroom and adapt themselves in the current time.

Preliminary Conclusions

The application of the research tools allowed to build the following preliminary conclusions:

- The students' observation allowed to identify the most important difficulties students had been within digital tools and applications operation, such as their lack of knowledge of words, identification and application of language skills. In addition, they presented problems in their language domain, which caused resistance and demotivation to participate in the classroom.
- The students' survey confirmed that the teacher is not totally capable to manage a digital class and still need to be better developed. In the same way students do not have full access to join into interactive activities, but despite of this they want to continue using technological resources.
- The teacher's interview concluded that applications and interaction are primary elements considered important in the class for setting the language process and domain.

CHAPTER IV

THE PROPOSAL

4.1. Topic

Didactic guide to work Inductive Learning using Collaborative Digital Resources to develop English Language Skills

4.2. General Objective

• To provide teachers a set of digital interactive English sources for improving 3rd Grade students' language skills

4.3. Specific Objective

- To demonstrate the main features of language skills strategies
- To guide the process of learning English with the use of technology and induction

4.4. Proposal Scheme and Development

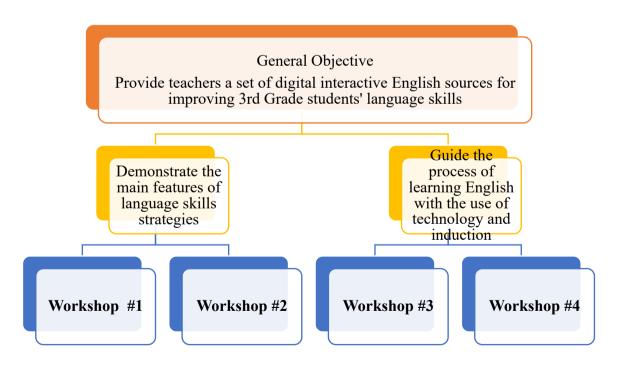


Figure 19. The Proposal Scheme

Elaborated by: Valencia & Villacis (2021)

4.5. The Proposal Scheme Development

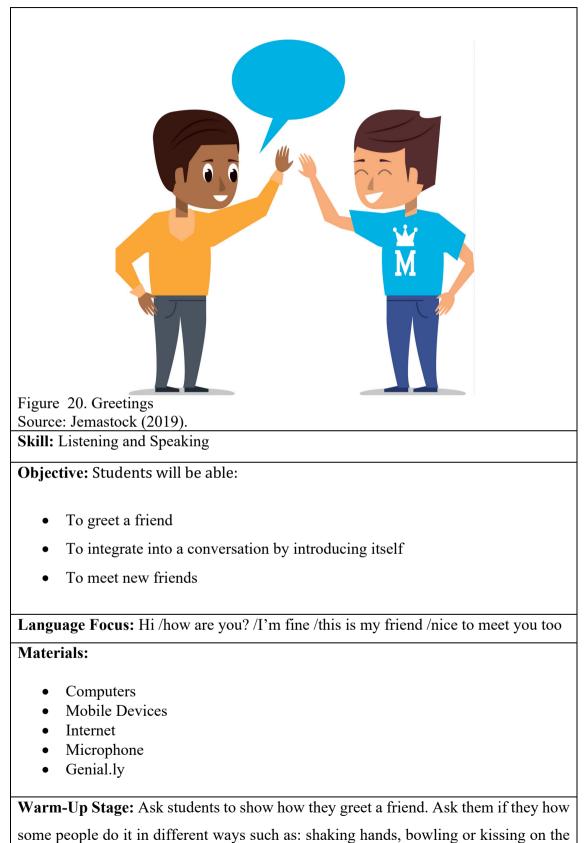


Didactic guide to work Inductive Learning using Collaborative Digital Resources to develop English Language Skills

Sharon Valencia and Jonathan Villacís 2020-2021

Activity #1

Greetings



cheek. Students will pretend to greet each other with a partner. Tell students they will learn how to greet a friend in English with short phrases if they can recognize.

Hi, how are you?

I'm____ How are you?

(Fine, good)

Presentation Stage: Teacher plays a video for the students during the session with a short dialog presented in a slide and choose two of them in advance to follow the dialog easily after the video. The two volunteers will choose one role and put a name tag, teacher will guide students to act out the dialog using gestures and speaking with the microphone only pointing the key words.

Practice Stage: Teacher tell students that they are in a conversation in order to meet a new friend in 2 min. They will adapt the previous dialog with their own information and play the different roles in different ways:

- Happy
- Nervous
- Natural

Production Stage: The teacher with help of a cartoon, a new script and a new video will be presented similar to the previous. Students will have 10 min to check and listen to review. 4 volunteers will perform naturally by memory without the script. Students will only have words on the slide to use in the new dialog.

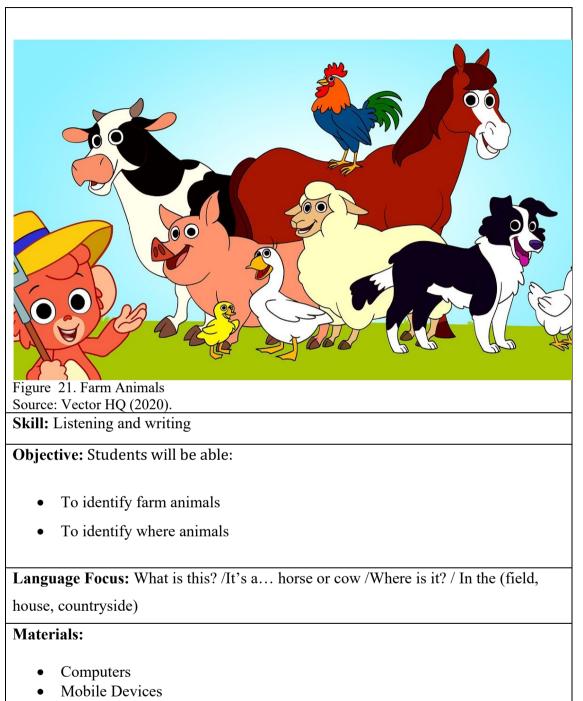
Evaluation

Table 12. Task Rubric

	Regular	Very Good	Excellent
Vocabulary			
identification			
Speaking			
management			
Elaborated by: Valenci	a & Villacis (2021)		

Activity #2

Farm Animals



- Internet
- Genial.ly
- E-flashcards

Warm-Up Stage: Teacher shows students some pictures about farm animals they can recognize or describe them. To ease students' comprehension, teacher can ask them and elicit some animals sounds. The teacher shows one flashcard of a horse, cow, pig,

chicken. Students in the web identifies the answer they can consider by clicking the banner. After that, students will have a period of time to look and repeat the sound of some animals. Finally, the teacher will change the order of the flashcards and they will have to guess making only the sounds of the animals they have recognized.

Presentation Stage: Teacher introduces the new topic with a big picture from a countryside in Genially. The teacher will point to all of the animals and let the students to discover where they are in the countryside. As soon as the students will follow the introduction of the new vocabulary and make repetitions with the teacher eliciting a characteristic.

Practice Stage: In this stage, students will be a given a new picture, with help of the teacher they will click on the picture and find the lost animals in the farm. As soon as they find animals, students will be writing the names of farm animals in English in their notebooks. Once they finished with all the missed animals, they will say the names of the farm animals out loud they wrote. Then, ask students to describe the animals by the color or any other characteristic. Once students can say the farm animals on their own, practice writing sentences with the farm animal names. The particular sentences you make will depend on the target language of your lesson. For example, you could ask them "What's this/that?" and they can answer "It's a pig.", or "Look! A cow!", etc.

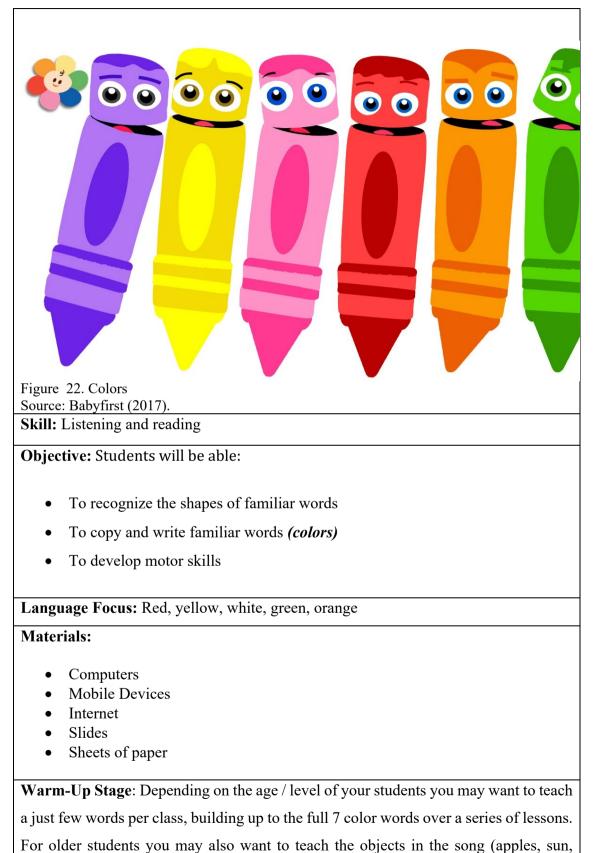
Production Stage: In this stage, 2 volunteers will have 5 min to find all the animals from scratch and name all of the animals they found while another partner will write sentences in the notebook with some characteristics and then they are going to speak aloud all the animals and sentences they made.

Evaluation

	Regular	Very Good	Excellent
ocabulary			
dentification			
Vriting			
nanagement			

Activity #3

Colors



flowers, grass, grapes, carrots, rainbow, sky). Prepare colored paper (origami paper is great for this) – enough colors for each student in your class (so, 1 red per student, 1 yellow per student, etc.). Hold up the first colored paper and elicit the color (e.g., red). Chorus and practice saying the color. Then pass the colored paper around the class so each student can hold and say the color. Do this for the rest of the colors.

Presentation Stage: To start the class, play one of the songs and ask students to try and guess what they will study today. Then, try to elicit some of color words from the students. Once students have an understanding of what they will study, it's time for a fun warm activity using the song. Give each student one color object. This can be a color pen/pencil, or you can use these color student cards. Then, play the song again and ask students to stand up when they hear their color. Once students have practiced one time, make it even more fun by speeding up the video on YouTube.

Practice Stage: Students will use these shading cheat sheets to practice the watchwords by showing the cheat sheets and requesting that partners say back to you. At that point, request that students attempt to say the tones all alone. Whenever students have adequately drilled, it's the ideal opportunity for a great cheat sheet game to rehearse some more. Put every one of the cheat sheets on the board and afterward advise students to close their eyes. Then, eliminate one of cheat sheets, place it face down on the work area, and afterward advise understudies to open their eyes. Highlight the cheat sheet on the work area and ask the understudies 'What tone right?'. Understudies should attempt to recollect what tone is absent.

Production Stage: Students will make use of an A4 cardboard and they will make a drawing of their neighborhood. For this activity they will be required to have the following materials

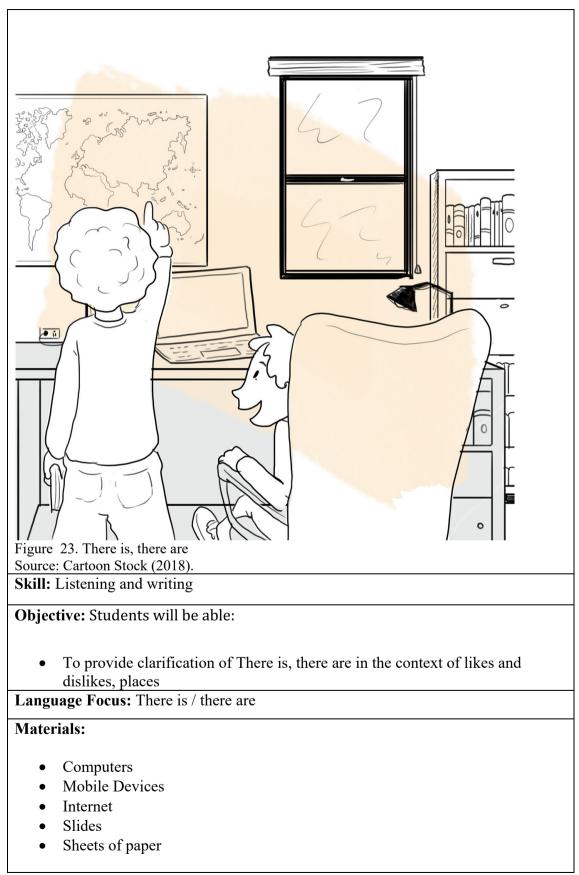
- 1. Color Pencils
- 2. Watercolor
- 3. Pencil
- 4. Scissors

Steps

- 1. Students will make a drawing of their houses and the neighborhood they are part from. Each part of the house must be in one color. Houses will be colored with color pencils and the background will be colored with watercolor print.
- 2. As soon as they finished the drawing, they will write sentences describing the colors from their art piece.
- 3. Then, students with help of an adult, they will cut the drawing in the form of a house and show the final result to the class. While showing the drawing, students will read all the sentences that describe their houses.
- 4. The teacher

Activity #4

There is, there are



Warm-Up Stage: At this stage students are going to talk about their favorite food and drink and also different buildings around the place where they live.

Presentation Stage: Show students a picture of your ideal room (any kind of room) and explain in simple English what is in your ideal room. For example:

In my ideal room there is a big sofa, there is a small plant and there are three big windows.

Ask students to close their eyes and imagine their ideal room (any kind of room). Give them some questions to help them visualize the room for example:

- What is in the room?
- Is there a chair?
- What kind of chair?
- Is there a desk?
- What can you see out of the window is there a view?

Practice Stage: Students were given 2 min during the Zoom session to take many objects as possible near them in order to name them. With help of the teacher, they are going to pronounce and follow the structure "What is in the room?".

Production Stage: Then, 2 volunteers will perform the last activity. Students A will take 2 min to select objects and show all of them in the screen. Students B has the possibility the see all the objects only one time. When students A finishes, he/she will come again and show only 4-5 objects, students B will have to guess and memorize which is the one that is missing. group each pair with another pair so that you have Pair A and Pair B. Tell students that Pair. At the end of one minute, Pair B can tell Pair A how they did and whether they missed anything. Pairs then swap roles.

Table 14. Task Rubric 3					
	Regular	Very Good	Excellent		
Vocabulary					
identification					
Writing					
management					
Elaborated by: Valencia & Villacis (2021)					

CONCLUSIONS

After the advancement of the flow research work, which has the goal of dissecting the impact of innovation put together ludic exercises with respect to oral creation in 3^{rd} grade. at Unidad Educativa Particular Apostol Santiago school year 2019-2020, and likewise, the examination of the exploration devices application, the accompanying ends were fabricated:

Through the survey of list of sources and the utilization of the examination apparatuses, it was feasible to establish that innovation-based exercises impact the oral creation The use of a bunch of innovation based ludic exercises to first year BGU understudies tested to be a significant viewpoint in the advancement of their talking ability. Understudies' jargon, articulation, stress and different parts of talking, just as their extraneous inspiration endured a positive impact because of the use of the exercises.

Furthermore, understudies will in general take part more in their classes when ludic exercises occur, since they have a superior mentality to become familiar with the objective language, which simultaneously, they think about fun and fascinating. Innovation based ludic exercises are at that point, a decent choice to be utilized, to get the vast majority of the understudies' consideration and have them engaged with their instructing learning measure.

Then again, it was resolved that the manner by which understudies learnt and rehearsed jargon, articulation and some other talking ability, through the exercises proposed, was by utilizing the objective language in a casual way, where their learning nervousness is decreased. The utilization of innovation based ludic exercises gives understudies a good air where they feel delighted and loose. Furthermore, this sort of exercises declines the dread of negative assessment in understudies which is the dread of being contrarily assessed or decided by others.

An overall idea for these kinds of exercises is that they work with the making of significant settings for language use. Students like these exercises because of the cutthroat components that make them intriguing and rousing for them. As can be found in this examination, understudies are supported by being essential for the exercises through games. They need to take an interest and, thusly, they feel the need to focus on their educator and companions. The use of innovation based ludic exercises permits the educator to offer less unsurprising classes, which will be more alluring to the understudies. Thusly, exercises would not turn into an anticipated daily practice.

RECOMMENDATIONS

- Instructors and associations should consider that sight and sound advancement is a philosophy in showing English language. Accordingly, it is basic to brace the odds that methodology carries to help understudies with achieving class objections
- Teachers and understudies should realize that they should know whatever amount of they can about the meaning of using mechanical devices in the activities of language instructing and learning. Furthermore, they should similarly comprehend that these devices may turn language showing more helpful, convincing, and useful.
- Educators should think about the power of applying appropriate blended media resources for plan important activities, so they will moreover improve their informative techniques by explore a couple of sources and resources at the web.
- Teachers should consider understudies' styles and singularities to learn in the assurance of media resources and in the elaboration of the development-based activities.
- Every media resource and activities arranged should consider the improvement of the talking sections like accentuation and language in setting, oration and commonality.

Bibliography

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- Alliance for Excellent Education. (2005). Tapping The Potential: Retaining and Developing High-Quality New Teachers. *Alliance for Excellent Education*.
- Asamblea Nacional. (2011). *Proyecto de Ley Organica de Educación Intercultural*. Retrieved from Asamblea Nacional: https://www.asambleanacional.gob.ec/es/system/files/ro_ley_de_ecucacion_inte
- Asamblea Nacional Constituyente de Ecuador. (2010). *Ley Organica De Educacion Superior*. Quito, Ecuador.
- *Basic Knowledge 101*. (2018). Retrieved from Learning Methods Thinking Styles -Teaching Methods:

https://www.basicknowledge101.com/subjects/learningstyles.html

- British Council . (2015). Retrieved from British Council : https://www.teachingenglish.org.uk/article/prior-knowledge
- Cresswell, J. (1994). *Research design: Qualitative and quantitative approaches*. Canada : SAGE Publications.
- Cunning worth, A. (1987). *Evaluation and Selecting EFL Materials*. London: Heinemann Education Book.
- Curtis, D., & M, C. (2008). Learning Together with Young Children. Red Leaf Press.
- Douglas, A. (2010). Sleep solutions for your baby, toddler and preschooler. Canada.

Economic Times . (2019). Retrieved from Economic Times : https://economictimes.indiatimes.com/definition/e-learning

- Greenhall, S., & Swan, M. (1986). *Effective Reading Teacher's Book*. Cambridge University Press.
- Grellet, F. (1981). Developing reading skills: A practical guide to reading comprehension exercises (Vol. 1). Cambridge: Cambridge University Press.
- Hedge, T. (2003). Teaching and Learning in the Language Classroom. Oxford University.
- Hutchinson, T. &. (1987). English for Specific Purposes: A Learner-Centered Approach. Cambridge. Cambridge: Cambridge University Press.
- International Bureau of Education. (2016). Retrieved from Curriculum Guidelines : http://www.ibe.unesco.org/en/glossary-curriculum-terminology/c/curriculumguidelines

Ireland Assignment . (2018). Retrieved from Ireland Assignment : https://www.irelandassignmenthelp.com/blogs/what-is-assignment-in-education/

Loeb, S., Dynarski, S., D, M., Morris, P., Reardon, S., & Reber, S. (2017). Descriptive analysis in education: A guide for researchers. United States: Institute of Education Sciences.

Margaret, K. (2009). Iris. Retrieved from Iris Center :

https://iris.peabody.vanderbilt.edu/module/induction/cresource/q2/p02/

- *Merriam-Webster* . (n.d.). Retrieved from Merriam-Webster : https://www.merriamwebster.com/dictionary/method
- Merriam-Webster. (2018). *Merriam-Webster*. Retrieved from https://www.merriamwebster.com/dictionary/method
- Netlanguage . (2017, July). Retrieved from Language Skills : https://www.netlanguages.com/blog/index.php/2017/07/25/what-are-languageskills-2/
- Prince, J., & Felder, M. (2006). *Inductive Teaching and Learning Methods: Definitions, Comparisons, and Research Bases.* Journal of Engineering Education.
- Richards, J. C. (1986). *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press.
- Tomlinson, B. (2008). *Language acquisition and language learning materials*. London, Continuum.
- Trevor, H. (2001). The Psychology of Language. Psychology Press.
- Widdowson, H. (1978). *Teaching Language as Communication*. Oxford: Oxford University Press.

ANNEXES



Annex 1. Students Survey

STUDENTS SURVEY

Mark with an (X) where you consider appropiate.

1- Which of the following elements do you use the most in class?

Mobiles Devices	Computers or laptops	Books

2- Does the teacher develop interactive activities through applications from the web?

3- Does the teacher introduce a series of activities during the classes in the week?

Totally agree	Almost agree	Not agree

4- Are the objectives from the class announced?

Totally agree	Almost agree	Not agree

5- Would you agree to continue teaching English online?

Tes	No

6- Which language skills does the teacher practice the most?

Speaking	Writing	Listening	Reading
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7- Do you consider that teacher has domain to the digital scene?

|--|

8- During the presentation stage, does the teacher use previous knowledge?

Totally agree	Almost agree	Not agree



Annex 2. Class Observation Format

OBSERVATION CLASS				
Teacher Name: Class:				
Signature:				
Development Grade:				
Yes No	DEVELO GRA		OBSERVATIONS	
	Yes	No		
Aptitudes, Method	ology and C	lassroom	Manners	
1. Make use of e-books or online				
information sources to				
provide the content				
2. The presented content is				
developed through slides or				
any different media (pictures,				
video)				
3. Introduce and present				
cooperative working between				
the students				
4. Assess students through the				
activities proposed on the				
platform				
5. Students are able to perform				
easily after the content				
presentation				
6. Teacher does not completely				
domain the management of applications and mobile				
devices				
7. Teacher is aware on the				
guidance with students with				
the applications				
8. Teacher incorporates extra-				
tools (web-ages) for				
undertaking new content				
9. Teacher shows empathy with				
students' difficulties during				
sessions				
10. Teacher demonstrates				
examples and make practice				
with students continuously				



Annex 3. Teacher's Interview

QUESTIONS	TEACHER
How important is your opinion about the application of technology resources in education?	I think it is important because interaction occurs within students across applications because there are many directions to go through such as: videos or pictures. Kids can learn naturally from near machines.
What actions are you taking for helping struggling learners with technology resources?	In this case, I adapt my lesson with recorded videos from myself as I guide, they can watch afterwards, in the same way I personalize the content into pdfs
What strategies are involved into a digital session?	I try to focus with a Natural approach-based class so they can associate with family as they are at home and mobile devices part of diary use.
How is the institution supporting you as a teacher with the present times?	During the school year, the principal organizes workshops with different companies to know and dominate resources that are implied. With the ease of the book, there is a platform where I can assess learners.
What is the best way you can induct students to a new content?	One of the most applied form I have used is from playing games, singing songs and dancing.



UNIVERSIDAD LAICA VICENTE ROCAFUERTE DE GUAYAQUIL Annex 4. Validation of The Proposed Project Plan

INDUCTIVE LEARNING AND COLLABORATIVE DIGITAL RESOURCES IN THE DEVELOPMENT OF ENGLISH LANGUAGE SKILLS AT THE PRESENT TIMES IN 3RD GRADE STUDENTS AT UNIDAD EDUCATIVA PARTICULAR 'APOSTOL SANTIAGO'. SCHOOL YEAR 2020-2021.

Alternatives	Very significant	Significant	Somehow significant	Not that significant
Scientific aspect	Х			
Social impact	Х			
Feasibility	Х			
Relevance	Х			
Originality	X			
Language	X			
Comprehension		X		
Creativity		X		

Rating Scale

Comments: This guide needs more details in the development of the activities to

guide teachers how to use.

Name:	Mélida Campoverde	Metica Consported
Occupation:	University Professor	Contra for
Phone Number:	0986103613	



Annex 5. Validation of The Proposed Project Plan

INDUCTIVE LEARNING AND COLLABORATIVE DIGITAL RESOURCES IN THE DEVELOPMENT OF ENGLISH LANGUAGE SKILLS AT THE PRESENT TIMES IN 3RD GRADE STUDENTS AT UNIDAD EDUCATIVA PARTICULAR 'APOSTOL SANTIAGO'. SCHOOL YEAR 2020-2021

Alternatives	Very significant	Significant	Somehow significant	Not that significant
Scientific aspect	Х			
Social impact	X			
Feasibility	X			
Relevance	X			
Originality	X			
Language	X			
Comprehension	X			
Creativity	X			

Rating Scale

Comments. Considero una propuesta factible para el desarrollo de las

habilidades delidioma inglés.

Occupation:English TeacherPhone Number:0992831226	Name:	Francisco Villao Villacres MSs	$\int O = \int$
Phone Number: 0992831226	Occupation:	English Teacher	Aue
	Phone Number:	0992831226	



Annex 6. Validation of The Proposed Project Plan

INDUCTIVE LEARNING AND COLLABORATIVE DIGITAL RESOURCES IN THE DEVELOPMENT OF ENGLISH LANGUAGE SKILLS AT THE PRESENT TIMES IN 3RD GRADE STUDENTS AT UNIDAD EDUCATIVA PARTICULAR 'APOSTOL SANTIAGO'. SCHOOL YEAR 2020-2021

Alternatives	Very significant	Significant	Somehow significant	Not that significant
Scientific aspect	X			
Social impact	X			
Feasibility	Х			
Relevance	X			
Originality	X			
Language	X			
Comprehension	X			
Creativity	X			

Rating Scale

Comments: Appropriate activities for the topic which will sure help 3rd graders achieve a better development in the target language.

Name:	MSc. Luis Leon Veliz	
Occupation:	Professor	Juin Out
Phone Number:	0997127878	