



Reading Comprehension in the Development of Communication Skills in High School Students



Esperanza Mariela Figueroa-Macias^a
Carmen Dolores Andrade-Zambrano^b

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Abstract

The objective of the research was study reading comprehension in the development of communicative skills, to respond to the lack of attention and concentration in reading in high school students, a situation for which students present difficulties when reading or interpreting what they read causing a loss in the comprehension of texts and poor communication. The methodology used was through the quantitative method applying different techniques such as: induction, deduction, analysis, synthesis, and statistics, where a survey was applied to a population of 1644, including parents, managers, teachers, students, staff administrative and service. It was obtained as a result that a good understanding and development of communicative skills improves learning and develops the obtaining of general ideas of a text, distinguishing main ideas, critically evaluating a text and finally developing cognitive skills.

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Corresponding author:

Esperanza Mariela Figueroa-Macias,

Maestría en Educación Básica

Universidad Laica “Eloy Alfaro de Manabí” Extensión Chone, Manabí, Ecuador.

Email address: esperanza.figueroa@pg.ulead.edu.ec

^a Foreign Languages & Applied Linguistics, Shanghai International Studies University (SISU), China

^b Translation, Rhetoric & CDA, School of Foreign Languages, Fuzhou University, China

1 Introduction

Reading comprehension is one of the existing difficulties in students in the process of developing communicative competences in the students of the Educational Unit FiscoMisional "Cinco de Mayo" of the city of Chone in the year 2022". The Declaration of Human Rights of 1948, in its article 26 recognizes that every person must have access to the fundamental right of Education to achieve the integral development of the human being, whose purpose is to guarantee an inclusive, equitable and quality education, promoting opportunities Learning. This is mainly because minimum proficiency standards in reading and other skills are not being met (UNESCO, 2015). The idea of researching this topic is to learn how to improve the development of communication skills in a learning process of language skills and communication skills, the strengthening of reading, writing and oral skills, some researchers such as Casas et al. (2009), state that reading is the skill that helps these to communicate and gives them the opportunity to perform socially and culturally individually and collectively, allowing the performance of spontaneous and effective actions that enrich their cultural baggage, production writing, vocabulary, analytical and critical thinking (Kahol et al., 2008; Alloway et al., 2004).

Reading comprehension is a necessary skill for the development of the communicative skills of a human being, which helps him analyze, interpret, criticize and assess his reality and improve it Ramírez (2017), he mentions that reading comprehension is the ability to understand what is read and therefore is part of the basic communication skills, essential to live in society, because in all areas of life at least one of them is used Pérez-Rosas (2017), he also mentions that the reading comprehension consists of understanding the ideas expressed by the author, as well as extracting the most important ones, it is one of the fundamental requirements for the study and where school performance depends on the reading ability of the individual, because it is one of the attitudes necessary to learn (Ninio et al., 1994; Piantadosi et al., 2012). Basic communication skills are a set of essential skills for the correct development of the communication process of the human being. The skills of knowing how to listen, speak, read, and write, allow you to function optimally in society, in addition, basic communication skills are a set of linguistic processes that are developed during life, in order to participate efficiently in all spheres. of communication and human society. From these language skills, such as speaking, listening, reading, and writing, socio-cultural development is achieved, creating communicatively competent people (Segura, 2016).

Starting from the analysis of several authors in the following inquiry, the conceptual references that support the investigation are exposed. In recent years it has been observed that there are students who often do not understand what they read, because in situations within the teaching-learning process, after a reading they are asked to configure the main ideas, and they are not able to identify them, also when they are required to summarize the reading they do not do it well, perhaps it is because they do not like to read, they are not interested or because they are distracted by other things, which determines to a certain extent the incompetence in communication, fundamental factor in the reading process. Reading comprehension determines the development of communicative skills in students (Edwards-Schachter et al., 2015; del Pilar Jiménez et al., 2019). A didactic strategy, well used, can improve the comprehension of written texts, in that sense Treviño et al. (2007), they mention that to strengthen reading comprehension, the teacher is required to provide adequate spaces and meet three basic conditions (Moghadam et al., 2012; Pearson & Gallagher, 1983).

In this context, the role of the teacher is focused on collaborating, facilitating and guiding the new academic environments, programming curricular activities that allow connecting the conceptual structure of their discipline with the cognitive level of the students, if the teachers detect some type of failure within given an opportune time, these could be overcome and get the students to stabilize for it, learning environments should be created that involve activities appropriate to their needs. Even so, authors such as Gómez (2008); Pérez (2008); Solé (1987); UNESCO (2009); Pérez (2010), have conceived that reading communicative competence as part of a skill specifies the should develop anyone who reads. This reading competence incorporates some components of language: phonological, morphological, syntactic and semantic (Jiménez, 2004). Furthermore, according to Carrasco (2003), understanding can also be taught and one way to cultivate understanding is to teach and develop reading strategies. Thus, (Hernández, 2003). On the other hand (Bruner, 1998) establishes that human beings are biologically trained to understand some meanings through "protolinguistic representations", which allow them to interact more easily in the environment (Price & Mechelli, 2005; Küçüköglü, 2013).

One of the factors that can affect the school process is also the learning environment Galvis (2001), describes a learning environment as something more than the set of resources used in the educational process, which are fundamental in the student learning; however, beyond these resources and materials, in each environment there is a philosophy, a reason for being, objectives and a teaching strategy. For his part Boude Figueredo (2011), he

understands a learning environment as a space built by the teacher with the intention of achieving specific learning objectives in which different actors (students, teacher, and ICT) intervene who play different roles, product of the pedagogical intentions of the teacher. The learning environment is the site or area where it occurs, when the student uses his tools and artifacts to collect and interpret information in interaction with others, seek resources to make sense of ideas and build significant solutions to problems (González & Flowers, 1999). The learning environment can also be defined as a transforming scenario where the intention to teach or train, or even both, converge, allowing the opening to diversity in paradigms, learning theories, methods, and strategies (Briceño & Cordero, 2009).

In relation to ICT, these play an important role in learning environments, favoring the teaching-learning process and motivating students to interact with the content, success will depend on the integration of these in each learning environment (Jaramillo & Castaneda, 2009). Incorporating ICTs in learning environments requires understanding that they are not just simple tools, but above all they constitute new conversations, new ways of interacting and exchanging information: narratives, relational links, ways of building identities and perspectives on the world (UNESCO, 2013). Taking advantage of the interactivity provided by ICT, as a motivational element, facilitates learning processes Gámiz (2009), these contribute to the development of pedagogical proposals relevant to the context in which students are, in the same way the content of ICT, they can contribute to overcoming difficulties that arise in students with some educational need (UNESCO, 2013). Palomo (2006), states that some advantages of ICT in students: their high motivational power predisposes them towards learning and increases their attention and interest in tasks (Handayani et al., 2019; Hidir et al., 2021).

In this sense Marqués (2000), he expresses that some of the functions of ICT in education are usually motivating: motivation is one of the engines of learning and can be enhanced thanks to images, video, audio, interactivity, animations, drawings, etc. colors. The learning of literacy can be favored with the use of ICTs, due to the stimulation of language, hearing, vision, attention, motivation, spatial and temporal structure that is achieved with the use of these (Hurtado, 2005). On the other hand, Álvarez et al. (2012), states that, with the advances of ICT, in recent years, there are new alternatives and technological spaces that can be used to overcome students' reading and writing difficulties (Mendoza & Rodríguez, 2020). In this regard UNESCO (2011), states that the early detection of students' learning needs allows adequate intervention with the use of ICT and should cover all students, regardless of the type of educational need that they have. The use of ICT strengthens reading comprehension, because it helps better communication and interaction between people Rodríguez (2008), facilitates interconnection and eliminates space and time barriers. Regarding the learning styles and rhythms of students with problems Riveros & Mendoza (2005), they state that the number of resources provided by ICT can respond to that diversity of learning styles. The use of ICT, according to UNESCO (2011), personalized learning requires that the unique needs of all students be met and that it be considered that each one of them learns in their own way, including those with disabilities, transitory, mild, moderate or severe.

2 Materials and Methods

This type of research allowed detailed and direct observation of the behavior of the variables, object of study, through the direct relationship with the analyzed elements, it was possible to investigate in depth their characteristics and describe them in a study report, the methodology applied in the research were the inductive, deductive, analytical, synthetic and statistical methods, according to Abad (2009), here the elements of a phenomenon can be distinguished and each of them is reviewed separately in an orderly manner. The techniques used in the investigation are those that allowed collecting field information, to support the criteria of the direct and indirect authors who are the object of study, according to Sampieri (1997), a survey was carried out with questions with one or more variables to size, in addition to the interview and the observation sheet, among the main ones. The observation sheet, according to Tamayo (2007), is one in which the researcher can observe and collect data through their own observation, we will use it to detect and identify the interest in reading in the students' lexicon, and to evaluate the reading comprehension in the development of the communicative competences of the young people of several determined subjects. The interview according to Sampieri (2006), implies that a qualified person applies the questionnaire to the participating subjects, the first one asks the questions to each subject and writes down the answers, therefore, we will use it to know the reading process in the communicative competences at your disposal. time to describe the integration of ICT to the educational process and therefore detect the interest in reading.

3 Results and Discussions

The study was carried out in the "Cinco de Mayo" Educational Unit, which consists of 1,644, including parents, directors, teachers, students, administrative and service personnel. The sample in which the research was carried out is 122 people, between third-year high school students and teachers, including 88 students and 34 teachers, where the process that the students followed when trying to understand various texts was evidenced. In the present study, an attempt is made to enter into the reality of the object of study in order to promote changes in the activities of the members of the educational community, with the institution's students being direct beneficiaries and the indirect ones, the entire educational community in general, allowing perform adequately in the educational and social field. The results of the research confirmed that reading comprehension in the development of communication skills in high school students' reflection a significant relationship between the two variables. This can be evidenced in the statistical results of the observation sheet, considering the following indicators: Read correctly with fluency; apply punctuation when reading; performs leisurely reading; performs expressive and meaningful interpretation of the text; emphasizes some paragraphs of the reading; presents some fear when reading in public.

The following result was obtained: 20% of the students do not read fluently, making it difficult for them to understand, however, there is a majority group that reads fluently, however, it is necessary to work on the process continuously. In the same way, 50% of the students read slowly, while the remaining 50% do not, even so, most of the students do not respect the punctuation marks, which prevents a leisurely reading from being carried out. consider the punctuation marks (Ramírez, 2017), mentions that reading comprehension is the ability to understand what is read and therefore is part of the basic communication skills, essential to coexist in society, because in all areas of Life uses at least one of them. In this way the student will be able to infer, analyze and interpret the texts he reads. The authors [Treviño et al. \(2007\)](#), mention that to strengthen reading comprehension, the teacher must provide adequate spaces and three basic conditions are met. It is agreed with the authors that the teacher should encourage and seek the appropriate spaces to strengthen teaching-learning by applying the methods, techniques, and strategies linked to reading. There are some techniques that help improve reading comprehension, these are shown in figure 1.

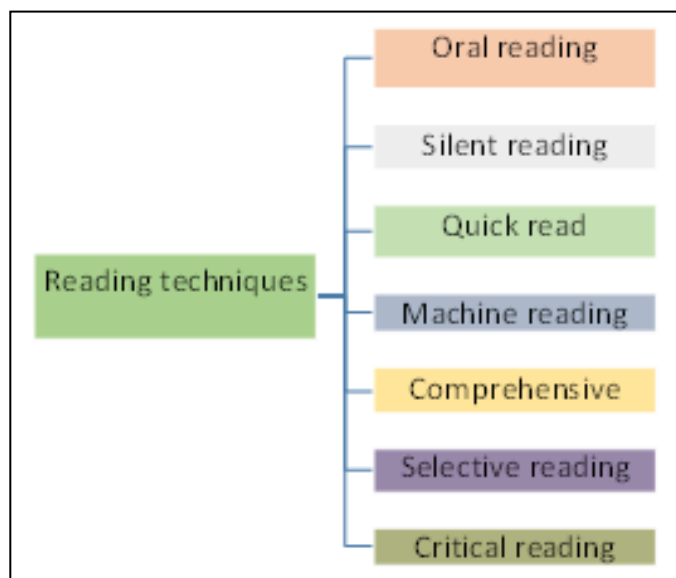


Figure 1. Reading techniques
Source: [Euroinnova, 2022](#)

As can be seen, there are different reading techniques that can be guided by teachers in such a way that students can improve the difficulties that are shown today in the educational unit. Another of the observation instruments that helped the development of the research are the indicators: spontaneously participate in class hours; pay attention to the moment a text is read; progressively expresses the ideas of a text, respects the turn when speaking; actively participates in group activities; reads with minimal or no expression, answers clear and timely questions about a text;

articulates clearly when reading; clearly exposes a summary of what was read; lacks expressive interpretation. These elements were investigated, achieving some assessments about them.

ICT in the reading process of students

Teachers consider that it is important to incorporate ICT in the reading process since it is logical to go hand in hand with technological advances, where education should not be separated from these, since technology in current moments motivates the students more, the interviewed teachers consider that the attitudes that their students manifest when ICT is used in the reading process are positive, of interest and motivational since the desire to learn is stimulated, presenting a favorable attitude emotionally having a conduct in relation to the management of ICT, promoting the creation of new forms of communication. While the remaining 20% state that it depends on the subject, if it is extensive, it becomes boring, but if it is specific it is pleasant for students. [Rodríguez \(2008\)](#) states that the use of ICTs strengthens reading comprehension, because they allow better communication and interaction between people, facilitate interconnection, and eliminate spatial and temporal barriers. On the other hand [Riveros & Mendoza \(2005\)](#) state that the number of resources provided by ICT can respond to this diversity of learning styles.

According to what was previously stated by the authors, ICTs strengthen the development of reading comprehension, it should also be emphasized that they can also communicate adequately with other people and express their own ideas, either orally or in writing, without leave aside the part of the available technological resources that will help complement the learning. In the same way, in reference to the interview with the teachers, it was possible to show that within the dimension to be considered in which the habit of reading improves the lexicon of the students, it was obtained that 90% of the teachers surveyed stated that through reading a student learns more, knows words, their meanings and can express himself with greater clarity and security. 8% say that it helps improve their lexicon and they learn new words. Finally, 2% state that it helps a good reading comprehension. Likewise, 100% of those surveyed consider that reading is important to improve the lexicon in students since through it oral expression is increased and the intellect is developed through reason.

The teachers interviewed stated that currently youth are not interested in reading texts due to the abuse of technology, the hectic pace of life, lack of habit, reading disorders or because there are teachers who do not motivate them and because the young people prefer the visual, images and social networks attract their attention, others consider that youth are interested; Finally, the interviewed teachers consider that students should know their weaknesses when reading, in addition, they must overcome these weaknesses to strengthen them, thus sustaining their reading process, by creating their own spaces for this activity, encouraging reading according to their tastes, talk about what they read, connect the reading with what they like the most and dedicate time to it. As stated, [Carrasco \(2003\)](#), understanding can also be taught and one way to cultivate understanding is to teach and develop reading strategies; another author argues that the mind should not be considered as an instrument in which meanings are deposited. The mind is linked to creation so it cannot be separated from the surrounding world in which the subject is immersed ([Hernández, 2003](#)).

Cultivating reading, as Carrasco mentions, is a very important factor throughout their lives since they will be able to understand, infer, select, and transmit everything read spontaneously through their own ideas and through practice. applying the different strategies that this activity implies. In the same way, the mind should not be taken as a whole, rote but reflective, since this is what will serve and apply it in your daily life. With the interview it was possible to show that, within the dimension to consider about reading comprehension, of the 25 teachers interviewed that reading comprehension is necessary, since, thanks to it, the student can argue and understand what he reads. In this way, reading fluently, with a good use of intonation, will allow understanding a text that requires reflection and mental effort, implying the recognition of words and the understanding of ideas, through comprehensive, reflective and critical reading.

60% of interviewed teachers state that they always follow up on their students regarding communication skills in the reading process, because this process must be taken into account to establish social relationships with their peers, where correct listening is integrated, reading, oral and written expression, developing interaction and pedagogical strategies that allow students to use the language correctly, both in oral and written communication; also know how to interpret and understand through activities such as public speaking, teamwork, among others. While 20% do it daily and the remaining 20% do it weekly through workshops, exhibitions. All the teachers indicated that the development of the lexicon does facilitate optimal communication, since if a student has a good vocabulary, they can build the foundations to develop their intelligence and organize their thoughts, and it is also a basic component for

the development of communicative competence. Being a tool of relationship with others, as stated Bruner (1998), this author establishes that human beings are biologically trained to understand some meanings through "protolinguistic representations", which allow them to interact more easily in the environment. On the other hand Galvis (2001), describes a learning environment as something more than the set of resources used in the educational process, which are fundamental in student learning; however, beyond these resources and materials, in each environment there is a philosophy, a reason for being, objectives and a teaching strategy. The reading process must be dynamic and interactive to understand the relevant ideas of a text, including being able to relate them to their own experiences, giving meaning to what is read and thus having the perception of what is going to be exposed or expressed.

4 Conclusion

Reading should be used as a bridge towards the development of more complex reading comprehension, through the creation of texts of different difficulty that allow progressively more complex comprehension strategies to be created, generating opportunities for students, leading to the generation of communicative and the lexical development that is a fundamental factor in learning a language as it is the component that gives meaning to the linguistic system. The ability to analyze, infer and interpret a text are part of reading comprehension, resulting in a good development of learning the lexicon of a language, without this there can be no communication, which generally constitutes the objective for the development of reading, and in this way the student can break down the correct acquisition of other academic competencies. Reading comprehension is one of the most important skills for life, which must be developed by the human being and even more so by students, since through it you can expand knowledge on a specific topic, applying the proper techniques that will lead you to deepen reading adequately and developing a good lexicon.

Conflict of interest statement

The authors declared that they have no competing interest.

Statement of authorship

The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

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References

- Alloway, T. P., Gathercole, S. E., Willis, C., & Adams, A. M. (2004). A structural analysis of working memory and related cognitive skills in young children. *Journal of experimental child psychology*, 87(2), 85-106. <https://doi.org/10.1016/j.jecp.2003.10.002>
- Alvarez, R. A., Pacala, S. W., Winebrake, J. J., Chameides, W. L., & Hamburg, S. P. (2012). Greater focus needed on methane leakage from natural gas infrastructure. *Proceedings of the National Academy of Sciences*, 109(17), 6435-6440.
- Boude Figueredo, O. (2011). Pediatric: desarrollo de competencias en TIC a través del aprendizaje por proyectos. *Educación Médica Superior*, 25(2), 116-124.
- Briceño, E., & Cordero, F. (2009). Uso de las gráficas desde una perspectiva instrumental: un estudio socioepistemológico.
- Bruner, J. (1998). *Acts of meaning: beyond the cognitive revolution*. Madrid: Alliance.
- Carrasco, A. (2003). The school can teach reading strategies and promote their regular use. *Mexican Journal of Educational Research*, 129-142.
- Casas, SA, Prada, AC, & Torres, AY (2009). *Strengthening reading comprehension through meaningful learning*. Free University.
- Castro, D. R. (2009). Reading comprehension levels. Conalep system. Mexico: redalyc.org.
- del Pilar Jiménez, E., Alarcón, R., & de Vicente-Yague, M. I. (2019). Reading intervention: Correlation between emotional intelligence and reading competence in high school students. *Revista de Psicodidáctica (English Ed.)*, 24(1), 24-30. <https://doi.org/10.1016/j.psicoe.2018.10.001>
- Del Rio Sodomil, D. (2013). *Social research methodology*. Madrid.
- Edwards-Schachter, M., García-Granero, A., Sánchez-Barrioluengo, M., Quesada-Pineda, H., & Amara, N. (2015). Disentangling competences: Interrelationships on creativity, innovation and entrepreneurship. *Thinking skills and creativity*, 16, 27-39. <https://doi.org/10.1016/j.tsc.2014.11.006>
- Espinosa, D., & Rochels, N. y. (2012). *Neuropedagogical strategies to implement in the Educational Cycle classroom*. Mexico.
- EUROINNOVA. (2022). *Reading Techniques Blog*. Obtained from Euroinnova:
- Galvis, A. (2001). *Educational environments for the computer age*. Colombia.
- Gámiz, V. (2009). *Virtual Environments for the Practical Training of Education Students*. Spain: Doctoral thesis.
- Gómez, L. (2008). The development of reading competence in the first grades of primary school. *Latin American Journal of Educational Studies*, 95-126.
- Gonzales, O., & Flores, M. (1999). *Teaching work: innovative approaches to course design*. Mexico: Threshers. https://etrillas.mx/libro/el-trabajo-docente_6473
- Handayani, N. D., Mantra, I. B. N., & Suwandi, I. N. (2019). Integrating collaborative learning in cyclic learning sessions to promote students' reading comprehension and critical thinking. *International Research Journal of Management, IT and Social Sciences*, 6(5), 303-308. <https://doi.org/10.21744/irjmis.v6n5.777>
- Hernández, F. (2003). Constructivism as a benchmark for neoliberal educational reforms. *Educere, Transfer*, 433-440.
- Hernández, F. (2003). Constructivism as a reference for neoliberal educational reforms. *Educere, Transfer*, 7(23), 433-440.
- Hidir, A., Zunaidi, A., & Pattiasina, P. J. (2021). Understanding human resources management strategy in implementing good government practice: what research evidence say. *International Research Journal of Management, IT and Social Sciences*, 8(3), 265-273. <https://doi.org/10.21744/irjmis.v8n3.1658>
- Hurtado, M. (2015). *ICT as a resource in access to reading and writing*. Spain: Cepco3.
- Jaramillo, P., & Castañeda, P. and. (2009). What to do with technology in the classroom: inventory of ICT for learning and teaching. *Educational Informatics*, 159-179.
- Jiménez, V. (2004). *Metacognition and reading comprehension*. Madrid Spain.
- Kahol, K., Leyba, M. J., Deka, M., Deka, V., Mayes, S., Smith, M., ... & Panchanathan, S. (2008). Effect of fatigue on psychomotor and cognitive skills. *The American Journal of Surgery*, 195(2), 195-204. <https://doi.org/10.1016/j.amjsurg.2007.10.004>
- Küçükoğlu, H. (2013). Improving reading skills through effective reading strategies. *Procedia-Social and Behavioral Sciences*, 70, 709-714. <https://doi.org/10.1016/j.sbspro.2013.01.113>
- Marqués, P. (2000). *ICTs and their contributions to society*. Cepalcada.

- Mendoza, G.M., & Rodriguez, M. (2020). Linguistic expression in the semantic awareness of second grade children. Atlas Magazine. Notebooks of Education and Development. Retrieved from
- Moghadam, S. H., Zainal, Z., & Ghaderpour, M. (2012). A review on the important role of vocabulary knowledge in reading comprehension performance. *Procedia-Social and Behavioral Sciences*, 66, 555-563. <https://doi.org/10.1016/j.sbspro.2012.11.300>
- Muñoz, GP (1992). National Program for the strengthening of reading and writing. Mexico: Pronalees.
- Ninio, A., Snow, C. E., Pan, B. A., & Rollins, P. R. (1994). Classifying communicative acts in children's interactions. *Journal of communication disorders*, 27(2), 157-187. [https://doi.org/10.1016/0021-9924\(94\)90039-6](https://doi.org/10.1016/0021-9924(94)90039-6)
- Palomo, R.R. (2006). ICT as agents of Educational Innovation. ESODidactic.
- Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. *Contemporary educational psychology*, 8(3), 317-344. [https://doi.org/10.1016/0361-476X\(83\)90019-X](https://doi.org/10.1016/0361-476X(83)90019-X)
- Pérez, J. (2010). Reading competence in Basic Education. The role of the Educational Inspection in its stimulation and development.
- Pérez, P. (2008). Reading comprehension and competence in linguistic communication in the new curricular framework. CEE Educational Participation, 41-56.
- Pérez-Rosas, A. (2017). Reading Comprehension. <https://www.redalyc.org/pdf/654/65456039005.pdf>
- Piantadosi, S. T., Tily, H., & Gibson, E. (2012). The communicative function of ambiguity in language. *Cognition*, 122(3), 280-291. <https://doi.org/10.1016/j.cognition.2011.10.004>
- Price, C. J., & Mechelli, A. (2005). Reading and reading disturbance. *Current opinion in neurobiology*, 15(2), 231-238. <https://doi.org/10.1016/j.conb.2005.03.003>
- Ramírez, L. (2017). "Reading Comprehension, a challenge for students and teachers". Retrieved from
- Riveros, V., & Mendoza, M. (2005). Theoretical Bases for the Use of ICT in Education. Educational Meeting, 315-336.
- Rodríguez, L. (2008). Use of icts to strengthen the reading comprehension of the students of the initial journey of the Sucre mission.
- Segura, M. (2016). Communication skills. <https://konpalabra.konradlorenz.edu.co/2016/04/las-habilidades-comunicativas-qu%C3%A9-son.html>
- Solé, I. (1987). The possibilities of a theoretical model for teaching reading comprehension. *Journal for the Study of Education and Development*, 1-13.
- Treviño, E., Pedroza, H., Pérez, G., Ramírez, P., & Ramos, G. y. (2007). Prácticas docentes para el desarrollo de la comprensión lectora en primaria. Mexico.
- UNESCO. (2009). Aportes para la Enseñanza de la Lectura.
- UNESCO. (2011). Las TIC accesibles y el aprendizaje personalizado para estudiantes con discapacidad. EEUU: Fleadmin.
- UNESCO. (2013). Aprendizaje a lo largo de toda la vida. EEUU: Target.
- UNESCO. (2015). "Resultados del Proyecto PISA 2000: Resumen Ejecutivo".