



Family Support for the Mathematical Learning of the Students of the Middle Basic Sublevel



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Abstract

Family support in learning mathematics in students who entered in 2021 has had difficulties, so this research will study the causes that caused it. The results of the research carried out through a survey of parents are shown, to investigate the responsibility of family support in the learning of sixth-grade students with respect to the support provided by parents in mathematics. A classification of topics on the family support of the students was carried out in the theoretical framework, through the analysis of family support, the causes of the conceptual errors are disclosed to improve the mathematical learning of the students. The objective of this research was to determine the correlation that exists between the perception and the support provided by parents in the subject of mathematics in sixth-grade students with respect to mathematical learning. The qualitative method was applied in addition to carrying out a descriptive investigation, in addition to the inductive and descriptive methods. The result was that family support affects the concept of this and the need to analyze, improve and propose a teaching-learning model based on a change in which parents are involved in their children's learning at school was observed.

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1 Introduction

The research was based on asking students to change their education in mathematical learning so that there is a conceptual change in the educational field in the teaching of mathematics. Family support is not seen as errors or something negative, but as cognitive structures that are the center or fundamental pillar in the educational process to achieve training in student development and that play an important role in learning. The concept of family is one of the main ones in the study and the greatest achievement in mathematical learning. The student who enters the university shows the difficulty in reasoning their understanding in mathematical learning only works at very low levels. To overcome these difficulties, it is necessary to pay attention to the family support that students have for a conceptual change, before beginning mathematical learning, all learning that students reach the classroom, with "knowledge" acquired from the basic experience and its experiences; those who respond to family support (Geary et al., 2009; Andersson & Östergren, 2012; Edelman et al., 2016; Prinz & Sanders, 2007).

The family plays a fundamental role in the teaching-learning process, if parents care about their children's education and collaborate with teachers, children favor academic achievement and adapt easily to school. Likewise, the participation of parents in education is associated with a positive attitude and behavior of children towards school, greater achievement in mathematical learning, better quality homework, and better academic performance in general. The active role that the student must have in order to learn and develop their knowledge, however, the possibilities of building knowledge will also depend a lot on what the intended knowledge is, its difficulty, and its nature. The greatest possibility of accessing information and knowledge that exist today: the teacher is no longer the only possible source of knowledge. Other issues are the selection and quality of the different sources, and their management so that the student builds knowledge, quality education must allow the acquisition of relevant knowledge for people, and it must be relevant and capable to keep diversity in mind, being characterized by its equity and its stability in learning.

The research suggests that various actors are involved in the educational care of the boy and the girl and one of them is the family, since it is in the closest environment, which influences by transmitting knowledge and promoting the development of habits, skills, and abilities. moral qualities. One of the existing difficulties is in the subject of mathematics, this is an essential instrument of scientific knowledge, but its abstract nature makes learning difficult for a considerable number of students, thus being one of the areas that most affect school failure in all teaching levels. Learning difficulties in mathematics can be one of the causes of school failure and can sometimes lead to the isolation of students in their educational environment and even dropping out of school. The teacher must know the causes and characteristics of these difficulties in order to treat them properly (Geary et al., 2009; Andersson & Östergren, 2012; Edelman et al., 2016; Prinz & Sanders, 2007).

The teacher plays an essential role and needs preparation to address the difficulties encountered, but her involvement when responding to attention to diversity; For this reason, it has been tried to know the methodology used by some teachers in the teaching of mathematics, as well as their training, concerns, and expectations regarding these difficulties. The research was carried out with the sixth-grade students of the Pedro Agustín López Ramos educational unit of the Pedernales Canton and these difficulties can be overcome if the student is fully involved in their learning process. Learning is an active process in which attention, memory, imagination, and the reasoning that the student carries out to elaborate and assimilate the knowledge that he is building and that he must incorporate into his mind play a fundamental role. We speak of mathematical learning as an activity, where the student learns spontaneously and his thinking is made up of a set of interconnected operations and the teacher must interpret the contents based on these operations.

The process of learning and teaching mathematics has become in recent years a widely complex and tedious task, the methodological strategy helps to improve the inter-learning of mathematics where students develop their critical, reflective, and reasoning capacity. thereby avoiding mechanical-repetitive learning. The problem arises from the experiences of the author in educational centers and especially from the concern of the academic performance of the students in the seventh year in the area of mathematics, for which the need to carry out a methodological strategy based on contemporary pedagogical currents was seen. that contributes to improving learning in this area. (Search., Methodological strategies for learning mathematics, in the 7th year of EGB of the quillons bilingual intercultural community educational unit, period 2016-2017, 2017)

With the intention of providing answers to these research problems, it was proposed Objective To determine family support in mathematical learning through a survey of parents, it is common to find that parents do not respond to the teacher's calls and are inhibited in the search for joint solutions. It can be concluded from these investigations that the family variable is a determining element in the academic processes, although the findings reveal that the accompaniment, permanence, and dedication of the families are decisive not only for the achievement of optimal

academic results, It is also in the formation of an emotionally healthy individual, who overcomes all kinds of social, cultural and economic barriers, who has the ability to be sure of their actions, show self-control, have well-forged habits and discipline and be able to behave and live in the community. (Lastre Meza et al., 2018). In the family, people's identity is formed, basic and learning needs are met, habits regarding education and work are acquired, and they learn to live with others, because norms, values, self-control, responsibility, social development, emotional balance, and autonomy are socialized (RAZETO, 2016).

2 Materials and Methods

The methodology applied qualitative approach, allows for investigation, analysis, and understanding, from the perspective of discipline and didactics of the knowledge of the correct concepts and the analysis of the family support of the students in the mathematical learning of sixth grade of the Pedro Agustín López Ramos Educational Unit. As a qualitative approach is a research that studies. Gallardo Echenique & Calderon Sedano (2017), "the task of the scientific researcher is to study the process of interpretation that social actors make of their "reality", that is, they must investigate the way in which meaning is assigned to things, "use the collection of data without numerical measurement to discover or refine research questions in the process of interpretation". Qualitative research does not study reality itself, but how reality is constructed. This implies studying it from the point of view of people and emphasizing the process of understanding on the part of the researcher. What matters is the perspective of the participants. At the epistemological level, this paradigm emphasizes subjectivity.

Qualitative contributions as indicated by Álvarez (2011), based on how it is proposed, on the one hand, that competent and qualified observers can report objectively, clearly, and precisely about their observations of the social world, as well as their experiences of others. On the other hand, researchers approach a real subject, a real individual, who is present in the world and who can, to a certain extent, offer us information about their own experiences, opinions, and values. Some quantitative contributions as indicated, (by Arteaga) Paradigms are a set of linguistic elements, models, or patterns, which generate during a certain period, an orientation to the development of research, a process through which new knowledge is discovered, contributing solutions to the problems posed. These approaches in the socio-educational field could be framed under the conception of the study of social and educational phenomena observed in a specific community, always taking into consideration the premise of the educational character over the social.

As the researcher Bustamante indicates with a simple look around us, we find a reality that has been sufficiently verified in studies and research, evidence of the enormous lack of training in our population: graduates of basic, intermediate, and higher levels with difficulties in writing a letter, in becoming understand, to express an idea, to make estimates, to propose reasoning or problem solving, analysis or synthesis of particular situations,... in short, intellectual limitations that lead us to ask ourselves: where is the origin of these problems? Will they be the product of technology or of our human, social and educational reality? It is more than investigating deep and rugged problems, studying simple situations and daily practices, common to our educational work and our sociocultural reality; This is an important source of research, even more around science that has a high value of social intersubjectivity such as Mathematics and Mathematics Education in general (Castro de Bustamante, 2001).

Those who are linked to the didactics of mathematics consider that students must acquire various forms of mathematical knowledge in and for different situations, both for its subsequent application and to strengthen didactic strategies in the learning and teaching process. This requires delving into the corresponding learning methods and, very particularly, appropriate techniques for the development of teaching. These methods and techniques can be categorized into large groups, which will be one of the objectives of this work. The documentary method was used by reviewing texts and articles according to the subject of study. The population studied was 400 students from the Middle School of the Pedro Agustín López Ramos Educational Unit, of whom 39 sixth grade students were randomly selected, who entered the Pedro Agustín López Ramos Educational Unit in the 2021 school year.

3 Results and Discussions

The results that are shown are the data obtained from the survey designed to know the previous knowledge that the students who enter the Educational Unit had Pedro Agustín López Ramos Oliva and Palacio (2003) also point out that

the way in which the student perceives his family environment, its dynamics, the importance that his parents give to study at home, to teamwork, to the time he spends at school, to family support, to his perception about the abilities and skills of children. The student's family context determines the economic, social, and cultural aspects that limit or favor their personal and educational development. The attitude that parents transmit to their children towards education, culture, teachers, and school has a great influence on their learning process.

The present study the result of establishing the relationship between family support and the school performance of the sixth-grade students of the Pedro Agustín López Ramos Educational Unit of the Pedernales Canton. To achieve this purpose, it was sought in the first instance to characterize the population, then to identify the level of school performance of the mathematical students, and finally to establish the relationship between the level of family support and school performance, it is assumed as a general hypothesis that the boys and girls who have better academic performance will be those with greater family support.

Fernández et al. (2012), Parents in public schools report jobs related to trades, none at a professional level, such as bricklayer, taxi driver, sweeper, store dispatcher, among others. Those from private schools work in sales, teachers, doctors, engineers, and accountants, among others. The mothers of the public schools work in trades as sellers of prepared foods such as tamales, pasta, and tortillas, in factories, restaurants, and cleaning; half of those from private schools are housewives, teachers, sales agents, dentists, nurses, office workers, among others. These data reveal differences, ranging from the impact of the type of their jobs to the time they can spend with their children, which affect their children's learning and school performance (Robelo et al., 2017). By feeling the support of their parents, students feel more motivated and develop a love for learning. On the other hand, teachers see major changes in their classrooms when parents get involved. From the motivation and performance of the student to improvements in their character.

The family plays a very determining role in the education of its members. It is considered the sociability of individuals since it is the first environment where its members develop at different levels: social, affective, physical, and intellectual. Therefore, given its great importance, the context of family support in relation to the academic performance of children has been studied for the last decades by numerous authors. This paper tries to analyze the influence of family support and examines other possible relationships between different family dimensions and performance in mathematical learning. To this end, observational research of a quantitative nature is proposed, carried out in a public school, with a sample made up of thirty-nine parents of sixth-grade students who were asked to fill out a questionnaire anonymously. The results obtained show us that both the participation of parents in educational centers, as well as their attention to their children, and a good family environment where support, affection and understanding prevail, exert a direct and positive influence on performance. academic of the students.

In the context of the above, the question about the role of the family in relation to the academic performance of students should necessarily be answered by recognizing that learning at school has to do with multiple emotional, cognitive and social dimensions. Students and their requirements constitute the starting point to establish a framework of reflections and suggestions to generate the best school support conditions in their homes. The involvement of parents is associated with various benefits for students of all ages. Even such a high level of involvement is not necessary, just by asking the child how school went and attending school meetings, parents can positively influence the student's future. According to experts in the field, the best indicator of a student's success is the extent to which families are involved in their education. By feeling the support of their parents, students feel more motivated and develop a love for learning (Sophian, 2004; Benavides-Varela et al., 2020; Whitenack & Knipping, 2002).

On the other hand, teachers see important changes in their classrooms when parents get involved. From the motivation and performance of the student to improvements in their character. Additionally, this collaboration can help identify needs and goals, and discuss how parents can contribute to their child's education. It also presents the opportunity to listen to the concerns of parents and help them learn more about their children's education, offering benefits to all parties involved: the school, teachers, parents, and, above all, the students.

Students can build on the strengths of different members of their families. Each person has unique talents and knowledge according to their experience, personality, preferences, and tastes. The child can learn more or train better in what his parents do very well. For example, a mother who likes history or biology a lot can share with her son her taste for these disciplines and countless knowledge. Similarly, a dad with excellent spelling can help his children and give them tips to develop this skill. Even parents who lack formal education or knowledge can bring a pro-knowledge attitude: they, too, are in a position to arouse their own curiosity and pleasure in learning. A student who has the emotional support of his family, in addition to financial support, will experience an intense desire to want to excel in his studies. Also, you will be more motivated and willing to stay in college and overcome the difficulties that come your way in the academic setting and in life.

Involving parents in the educational process is very necessary, we know that they are a fundamental part of achieving the goals set, which is why they are repeatedly sought to be involved in school activities. Likewise, it is known that the training of students should be a shared task between school and home since the benefits that working in an articulated and close manner brings are evident (Guo, 2018; Hussein & Dawood, 2018; Kpohoue, 2018; Tambychik & Meerah, 2010). Given the fundamental role that the family adopts in terms of children's school performance, the importance of this study for the educational community is evident, since it can provide valuable knowledge about what aspects can positively influence or negative in the educational process of the student and how to improve the participation of parents in this process, teaching them to understand the possible difficulties of their children in their learning and to have a favorable affective disposition towards them.

School and family have to share concerns, and exchange information and thoughts about education, school, and children, this promotes the establishment of pacts and agreements on certain actions towards the child. The family has to apply the agreements reached and try to transfer school knowledge to daily life, and the school must reach the agreed or proposed objectives in each child and transfer and apply family and daily knowledge to school life in a way that achieves this interrelation and union between formal and non-formal education and that expected support and effectiveness (Martínez, 2010). The school normally gives students the responsibility of their learning and the application of a certain discipline, it is currently known that learning is not an exclusive matter of the learner, but also of the one who has the task of teaching, in most of cases teachers.

Students have been assigned the role and responsibility of learning, which predisposed them to pay, in the recent past, very little importance to learning compared to the general ideas about teaching, widely treated in the literature related to education, pedagogy and didactics. Considering that students can learn independently only if they come into direct and active contact with the object they want to learn. In the case of the study with the intra and extra-mathematical object, they in this way could assume a certain responsibility for their learning, since it is not a fact unrelated to teaching methods.

It is considered that some fundamental aspects related to the teaching of mathematics must still be deepened, which will considerably influence the learning process, these aspects of education are mutually related, they are closely linked to the concept of school evaluation, which is dealt with in greater detail on another occasion, since the need to make some reflections and theoretical and practical precisions in relation to the current characteristics and trends of mathematics education is perceived (Mora, 2003).

Mathematics is one of the most complicated subjects to teach, its complexity, which involves many of the formulas and the problems to be solved, can cause boredom among some of the students. The impotence of the students when finding difficulties in solving exercises can weigh down the rhythm and dynamism of the class, so it is important that you know some techniques to improve as a math teacher and make your classes as entertaining as they are didactic. (teacher, 2016). Although individual action and reflection are essential, it is through interactions with others that mathematics is learned. In this case, the others include classmates, teachers, siblings, parents, and even books, videos, and games. Interactions are the vehicle that encourages the questioning of present ideas and the construction of new ways of looking, for this reason, it is recommended to use work tables so that students can dialogue and share strategies (Guerrero, 2020).

Little ones learn better with experiences and practices, so it is ideal to teach mathematics in their learning environments. The home and the classroom are full of everyday objects through which children have the opportunity to understand concepts and solve basic operations such as counting, addition, and subtraction. At home, a simple chocolate chip cookie recipe can translate into the opportunity to exercise in small skills such as calculating the time and temperature to cook, the number of ingredients, and the measurements of all these in weight or volume. Everyday objects such as glasses, pots, cereal boxes, and funnels lend themselves to introducing or strengthening geometric concepts such as cylinders, cubes, and cones (Artmann et al., 2020).

In the same way, the external factors are directed towards the learning in the student caused by what the teacher imparts to them, in addition to this, the personality that the teacher externalizes before the group, the teaching methods, as well as the contents put into practice. each planning that is closely related to teaching activities, techniques, instruments and conditions in the evaluation of each student, the educational environment, the group climate, among others. The use of didactic strategies raises the use of the collective character, finding common solutions, which will turn knowledge into a challenge, in such a way that it allows increasing confidence in the student, by developing the knowledge derived from oral communication. executed through the use of social values as a support tool. Therefore, it is necessary to propose didactic strategies according to group characteristics, which guarantee greater participation of students in group form.

Mathematics knowledge must be learned in an understandable and sequential way, starting from experience and prior knowledge and putting it into practice through everyday cases or those that adjust to the needs of the context in which they operate (Alvarez Buscan, 2017). In many social sectors, strong critics are heard about the difficulties that students face in learning mathematics. Many researchers point out that these criticisms and the very rejection of this discipline are not due to aspects related to its nature, but are the result of stereotypes created around it and that are transmitted in the family and educational environment. This fact causes students to acquire certain. In this research with the objective of analyzing, the concepts that are considered basic concepts are incorporated in the teaching processes of mathematics in students, these can be seen in figure 1

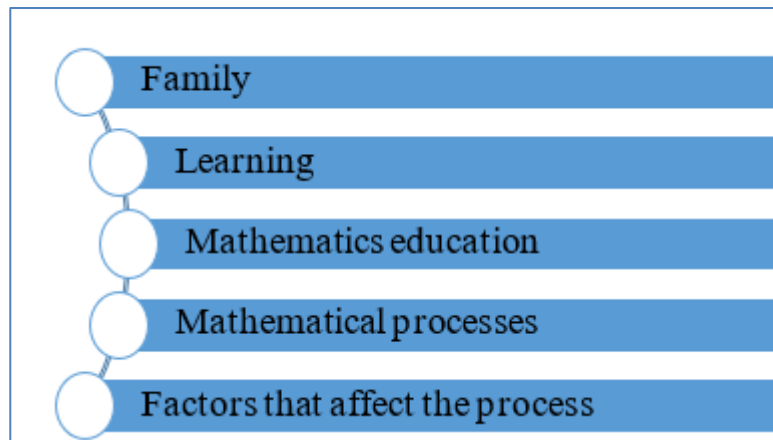


Figure 1. Factors that are considered basic in the process of teaching mathematics

The parents of the sixth grade of the Pedro Agustín López Ramos Unit of the Pedernales canton of the 2021 school year were asked structured questions. The first question was related to family support in the homes of the children. students for their children in the learning process, showing the results in table 1.

Table 1
There is support from the father and mother of the family in the homes

Alternatives	Frequency	Percentage (%)
Yes	4	10
No	29	74
Sometimes	6	16

How observed, it can be analyzed that of the parents surveyed, 74% say that there is no support from the father and mother of the family at home for their children in the learning process, 16% of the parents surveyed consider that sometimes there is family support at home in the learning process and 10% of parents state that there is support from the mother and father of the family in learning. In figure 2, you can see a question related to the difficulties that exist in homes that do not have what is necessary to live can represent problems that affect mathematical learning.

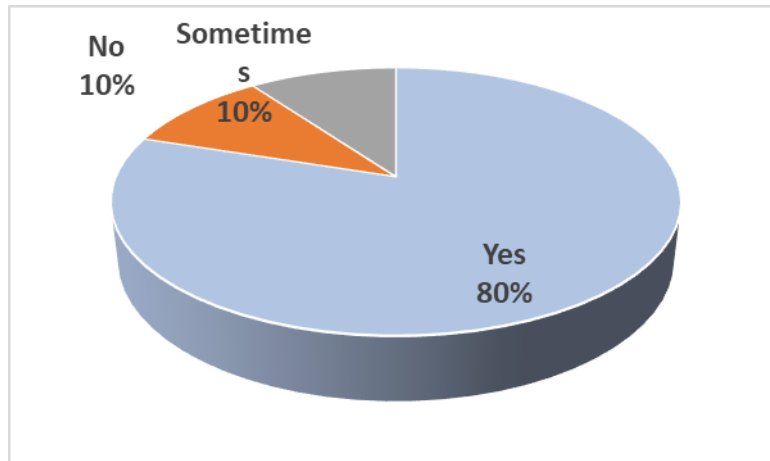


Figure 2. Problems that affect mathematical learning

As seen, the response given indicates that 80% answered yes, demonstrating in this case that the majority of parents are clear that in homes that do not have the essentials, it represents a problem for student learning, 10% of parents are not clear about how important it is to have what is necessary to live and 10% sometimes give importance to having what is necessary to live, demonstrating that the knowledge that a considered percentage has of respondents is not appropriate. It was asked if the relatives control their children's homework, the results are shown in Table 2.

Table 2
Control of their child's homework and material(a)

Alternatives	Frequency	Percentage (%)
Yes	8	21
No	27	69
Sometimes	4	4

As can be seen, the response given indicates that 69% answered that they do not control their child's homework and material, demonstrating in this case that the majority of the group is not clear about the importance of family support in mathematical learning, 21% state that if they control their child's homework and 4% sometimes control their child's homework, this demonstrates that the knowledge that the respondents have is not adequate. It was necessary to consult if the relatives periodically went to the educational establishment to be informed about the performance and behavior of their child(a), the results are shown in figure 3.

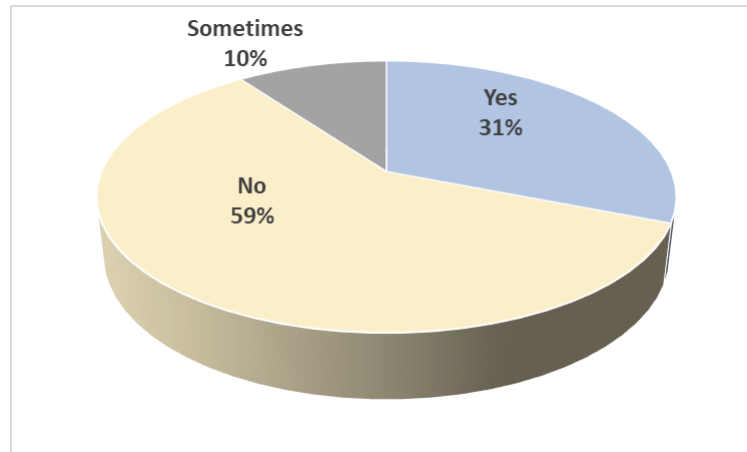


Figure 3. Family members visit their children's schools

These responses given indicate that 59% answered no, demonstrating in this case that most parents do not go to the educational establishment to know the performance of their child, 31% if they are clear about the importance of family support, and 10% sometimes go to the school to find out about their child's performance and behavior. These results that have been analyzed, show the existing difficulties in the educational unit in the subject of mathematics, where families do not support their children in the aspects evaluated, so there must be a strategy for teachers to change this image and ensure that students have a better appropriation of knowledge in the subject of mathematics.

With the application of the survey, it was possible to verify the existence of determining elements for the achievement of a good academic performance, among these and others we can mention the time that parents dedicate to guiding, explaining to their children about school activities, in case the father enjoys an educational level to respond to academic demands, it is their duty to act as a facilitator of means to satisfy this need, the important thing, in any case, is to give solutions and ensure that the child does not arrive at the classroom without fulfilling their responsibilities. The use of school support as a cognitive possibility, as a starting point for the mathematical learning of some concepts, can be achieved through strategies. This research reaffirms that for meaningful learning from school it is necessary the active intervention of the family to support their child daily in all school activities (Párraga et al., 2018; Ramos et al., 2018; Wilson, 1990; Chu, 2010; Turner & Sanders, 2006).

4 Conclusion

The need to analyze, improve and give a significant correlation between family support and academic performance in the subject of mathematics is verified. In the student's mind. It was possible to demonstrate that family support affects low academic performance in mathematical learning and the need to analyze, improve and propose a model based on a conceptual change is observed

Conflict of interest statement

The authors declared that they have no competing interests.

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

- Alvarez Buscan, NJ (2017). *Methodological strategy for learning mathematics in the 7th year of EGB of the Quilloac Bilingual Intercultural Community Educational Unit, period 2016-2017* (Bachelor's thesis).
- Álvarez, C. A. (2011). Methodology of the quantitative and qualitative investigation. *Didactic guide. Surcolombiana University* , 1-216.
- Andersson, U., & Östergren, R. (2012). Number magnitude processing and basic cognitive functions in children with mathematical learning disabilities. *Learning and Individual Differences*, 22(6), 701-714. <https://doi.org/10.1016/j.lindif.2012.05.004>
- Artmann, M., Sartison, K., & Vávra, J. (2020). The role of edible cities supporting sustainability transformation—A conceptual multi-dimensional framework tested on a case study in Germany. *Journal of Cleaner Production*, 255, 120220.
- Benavides-Varela, S., Callegher, C. Z., Fagiolini, B., Leo, I., Altoe, G., & Lucangeli, D. (2020). Effectiveness of digital-based interventions for children with mathematical learning difficulties: A meta-analysis. *Computers & Education*, 157, 103953. <https://doi.org/10.1016/j.compedu.2020.103953>
- Castro de Bustamante, J. (2007). Research in mathematics education: a working hypothesis. *Educare* , 11 (38), 519-531.
- Chu, R. J. C. (2010). How family support and Internet self-efficacy influence the effects of e-learning among higher aged adults—Analyses of gender and age differences. *Computers & Education*, 55(1), 255-264. <https://doi.org/10.1016/j.compedu.2010.01.011>
- Edelman, L. F., Manolova, T., Shirokova, G., & Tsukanova, T. (2016). The impact of family support on young entrepreneurs' start-up activities. *Journal of business venturing*, 31(4), 428-448. <https://doi.org/10.1016/j.jbusvent.2016.04.003>
- Fernández, C., Llinares, S., & Valls, J. (2012). Learning to notice students' mathematical thinking through on-line discussions. *ZDM*, 44(6), 747-759.
- Gallardo Echenique, EE, & Calderon Sedano, CA (2017). Research Methodology: interactive self-training manuals.
- Geary, D. C., Bailey, D. H., Littlefield, A., Wood, P., Hoard, M. K., & Nugent, L. (2009). First-grade predictors of mathematical learning disability: A latent class trajectory analysis. *Cognitive development*, 24(4), 411-429. <https://doi.org/10.1016/j.cogdev.2009.10.001>
- Guerrero, J. P. (2020). The Importance of the Strategy Processes, Selection and Implementation of Appropriate Software to Each Company. *Accounting Notes* , (25).
- Guo, J. (2018). On the postmodernity in a dictionary of Maqiao. *International Journal of Linguistics, Literature and Culture*, 4(4), 17-24. <https://doi.org/10.21744/ijllc.v4n4.256>
- Hussein, A. L., & Dawood, Z. A. (2018). Salient socio-stylistic traits of English and Arabic junior songs. *International Journal of Linguistics, Literature and Culture*, 4(4), 86-102. <https://doi.org/10.21744/ijllc.v4n4.270>
- Kpohoue, F. (2018). The black community portrayal in toni morrison's the bluest eye (1970), sula (1973) and song of solomon (1977). *International Journal of Linguistics, Literature and Culture*, 4(5), 20-30. <https://doi.org/10.21744/ijllc.v4n5.289>
- Lastre Meza, K., López Salazar, L. D., & Alcázar Berrío, C. (2018). Relationship between family support and academic performance in Colombian primary school students. *Psychopeople* , 21 (39), 102-115.
- Martínez, S. D. (2010). Education, a thing of two: The school and the family. *Digital Magazine for Teaching Professionals* , 1 (8), 1-15.
- Mora, CD (2003). Strategies for learning and teaching mathematics. *Journal of Pedagogy* , 24 (70), 181-272.
- Párraga, W. E. R., Campos, M. S. A., & Hernández, E. H. O. (2018). Mechanical properties of artisanal bricks. *International Research Journal of Engineering, IT and Scientific Research*, 4(4), 1-6. <https://doi.org/10.21744/irjeis.v4n4.252>
- Prinz, R. J., & Sanders, M. R. (2007). Adopting a population-level approach to parenting and family support interventions. *Clinical psychology review*, 27(6), 739-749. <https://doi.org/10.1016/j.cpr.2007.01.005>
- Ramos, J. L. M., Pérez, A. V., Gámez, M. R., & Zambrano, R. V. H. (2018). Renewable energy sources on the change of energy matrix in Manabí province. *International Research Journal of Engineering, IT and Scientific Research*, 4(4), 17-29. <https://doi.org/10.21744/irjeis.v4n4.255>
- Razeto, A. (2016). The involvement of families in the education of children: Four reflections to strengthen the relationship between families and schools. *Education Pages* , 9 (2), 184-201.

- Robelo, O. G., Márquez, J. H., & Ramirez, A. B. (2017). Family support for mathematical learning in public and private urban primary schools in Mexico. *Athens*, 4 (40), 46-60.
- Sophian, C. (2004). Mathematics for the future: Developing a Head Start curriculum to support mathematics learning. *Early Childhood Research Quarterly*, 19(1), 59-81. <https://doi.org/10.1016/j.ecresq.2004.01.015>
- Tambychik, T., & Meerah, T. S. M. (2010). Students' difficulties in mathematics problem-solving: What do they say?. *Procedia-Social and Behavioral Sciences*, 8, 142-151. <https://doi.org/10.1016/j.sbspro.2010.12.020>
- Turner, K. M., & Sanders, M. R. (2006). Dissemination of evidence-based parenting and family support strategies: Learning from the Triple P—Positive Parenting Program system approach. *Aggression and Violent behavior*, 11(2), 176-193. <https://doi.org/10.1016/j.avb.2005.07.005>
- Whitenack, J. W., & Knipping, N. (2002). Argumentation, instructional design theory and students' mathematical learning: a case for coordinating interpretive lenses. *The Journal of Mathematical Behavior*, 21(4), 441-457. [https://doi.org/10.1016/S0732-3123\(02\)00144-X](https://doi.org/10.1016/S0732-3123(02)00144-X)
- Wilson, E. B. (1990). *An introduction to scientific research*. Courier Corporation.