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## Implementation of an Academic Software for Children from 6 to 8 Years Old for Easy Learning in Basic Mathematics and Reading Comprehension

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### ABSTRACT

Nowadays teaching has not improved talking about the methods to get to interest the student or want to learn, it is not common for schools to have a didactic and innovative curriculum, we continue to maintain in do the same learning format of years ago and it is one of the areas in which we do not evolve compared to others. As we well know, among the most important foundations in education are the reading comprehension and mathematics courses, because these are the pillars to have facilities in learning with other courses in the future and that is why it is important to ensure the knowledge of these courses in childhood so that these students do not present difficulties to learn in the future. That is why in the part of basic education we see important the implementation of an educational software for children, to improve their motor capacity in terms of learning the area of mathematics and reading comprehension, since relying on statistical data we realized that the levels of knowledge in these courses, They are not the desired ones, therefore, we agreed to project a new way of learning so that children can be interested in wanting to learn, for this we develop a plan in which it is proposed to implement educational games, memory games, didactic reading, among others, all this to ensure that children improve their learning through new learning methodologies.

## 1. Introduction

In the year 2019 prior to the pandemic, the last sample evaluation was carried out in Peru, which is a standardized evaluation that is applied to a sample of students from state and non-state schools, in order to measure their learning [1] achievements. The learning achievements of this evaluation are measured in three levels that are start, in process and satisfactory, and the national results were: in 2nd grade of primary in Mathematics 51.1% of students are at the beginning level, 31.9% are in process and 17% in satisfactory, improving by approximately 2% at all levels, but even so, more than 50% of students are in the first level noting that they did not achieve the expected learning. On the other hand, in Reading 3.8% of students are at the beginning level, 58.6% are in process and 37.6%

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are at a satisfactory level, this gives us to understand that in reading the students of 2nd grade of primary school are better than in mathematics, but still more than half do not reach the satisfactory level in this evaluation [2].

The pandemic has affected many sectors of daily life, especially education, as millions of teachers and students have had to adapt to the new way of accessing knowledge and interacting with technology, even those who resisted digital had to integrate into the new method of teaching and learning [3]. It is clear to mention that parents have had to adopt the role of teacher, and in most homes, this is not entirely satisfactory, most parents feel that face-to-face is irreplaceable, in addition children and adolescents have presented difficulties to remain attentive to classes and participate in activities. In addition, the Ministry of Education with the "Aprendo en casa" program did not obtain the expected results, since, in 2020, 230 thousand primary and secondary students left the educational system and 200 thousand enrolled secondary students are not accessing this service [4].

In the results of surveys conducted between April and July 2020 to more than 10 thousand families throughout the country on the "I learn at home" strategy; They show us two out of 3 parents are satisfied with the content and the vast majority have been contacted by a teacher or tutor, on the other hand, it shows us that there are gaps in connectivity for the program in their homes [4].

And with the radical change towards the use of Information and Communication Technologies for learning in times of pandemic we go to the number of families that have some ICT so that the members of this can learn and because in Peru in the fourth quarter of 2021, 95.3% of households in the country have at least one ICT, in 94.2% of households in the country there is at least one member with a mobile phone, in households in Metropolitan Lima 75.1% have Internet and 51.6% have a computer, in the rest of the urban 58.7% of households have Internet access and 40.2% have a computer and in rural areas 18.5% of households have Internet and 8.7% have a computer and as last data is known that 80.1% of children aged 6 to 11 have access to the internet [5].

In children from 5 to 7 years of age there is a lack of interest, lack of concentration, confidence and security when reading, either because there is illiteracy in parents or simply because it does not cause them interest and this is generated because they do not capture the attention of the child with the teaching format carried out by the teacher, Therefore, one of the options to improve the capture of the child's attention is by combining the class with some audiovisual technology to awaken that concern towards witnessing new things but in a teaching format [6].

From different situations on the part of the teacher, primary school students construct the meaning of different arithmetic operations, recognizing the problems solved by each of them. In addition, they consider calculus as an "object of study", in itself when comparing it with other procedures, discussing whether these helps solve other situations, or if they can be simplified or shortened. Boys and girls want to know the most comfortable calculation instead of automatic application algorithms. For example, if the stones are close, round, or have some match, they can be resolved in your head faster than with pen and paper or a calculator. There are various processes that are supported by the properties of the structure and operations of the decimal number system. Although children use them from first grade, without naming or defining them, later these qualities gradually become "objects of study", that is, they will express themselves in which situations it is worth using and in which they are not. Every teacher knows that learning operations and their properties is one of the axes of school work, and there are different forms of calculation: approximation, exact, mental, use of calculators or algorithms. Students are expected to improve confidence in calculating, test the results they have achieved, and review and reinforce their learning. Students are expected to have the opportunity to review what they have done in different years, in order to identify and systematize the knowledge acquired related to performance characteristics and use it to enrich their skills, especially through group work and mathematical games [7].

Mathematics is a difficult course to learn for most and especially for those who for the first time know the course, in this case children from 6 or 7 years old in which they acquire their first course of mathematics, but at the time of learning also influences the teaching methods of the teacher. What is desired is that teachers project that the course is fun with the appropriate didactics or methods, instil mathematical reasoning and not simply teach to memorize problems, propose interaction with topics, mentioning create and solve problems supported by group work to achieve greater communication between student-teacher and student-student [8].

There is no doubt that math matters more and is best learned when applied near real-life scenarios. Our students are most satisfied when they can relate any mathematics they learn to the reality around them. They are mathematics for life and their results will be presented in the future [9].

In the following research work [10], they investigated whether the implementation of an educational software on geometry would improve learning in children since they had difficulties when learning this subject, first, this software was created in Adobe Flash C23, because it provides a diversity of tools for the design of interactive exercises with the aim of obtaining an ideal space for those who use the software. After the use of the software, it was corroborated that this achievement stimulates and motivate children in the development of the proposed exercises. And it was confirmed that the implemented software learning about geometry captures the attention of children since it has a variety of resources and processes to facilitate the learning of geometry, in addition to the fact that thanks to this research they were projected to the creation of different software's on various topics of basic education.

In this work, the use of the GeoGebra application is being implemented so that both young people and children can learn mathematics by innovating the teaching process. This article shows us a way of learning more technology because young people and children were born or grew up with technology under their arm. Therefore, the GeoGebra program can facilitate the learning of mathematics. Mathematics is an important area for a human being since with the learning of this same there is a great advance in scientific development, social welfare and also thanks to this gave rise to various sciences, if [11] never, the learning of this same is the most complicated that can be learned, but also to teach and this would already be a challenge for the teacher or teacher to teach them and above all that the student learns and understands the topics that are developed. The teacher plays an important role when implementing GeoGebra in the teaching of his students since what he has to achieve is to make his students lose the fear, they have of mathematics by having interactive and enjoyable classes so that the student can see the total use of mathematics in their daily lives and apply it with real problems.

In the following work, the educational software "We are all different and valuable" was implemented to [12] face the problems that some children have before their peers who have a disability, first a questionnaire was carried out prior to the software to show the possible changes that the use of the software would cause, then we proceeded to deliver the educational software on the appreciation for diversity that deals with reading pages in which there were texts and solving The activities that were proposed, finally after the use of the software the second questionnaire was carried out to compare the answers and draw conclusions about what effects the software caused with respect to its response in the first questionnaire. There is a noticeable change in the concept of diversity and the action of inclusion and coexistence. This software was attractive to the respondents and the expected learnings were achieved. Most of the subjects in the sample developed an appreciation for diversity and also showed greater development in the possibility of dealing with a child with disabilities.

Finally in this research, the Berni software was implemented that was developed to face the problems of reading comprehension, this software was created in Adobe Flash Professional CS6 and is in portable and online version, in the portable version it is divided into subfolders that facilitate the creation of new exercises and the modification of these, on the part of the online version it was created in HTML5 and CSS3 which allows you to open it from any electronic support, also throughout this page the Open-Dyslexic open source font type has been used. It also has a database and an administrative page [13].

The results of this software are that the design of this allows the student to work autonomously without the need for constant supervision, in addition the students did not show difficulties in understanding its operation and carry it out without external help, to finish, the structure of Berni has favoured the understanding of what has been worked and autonomous work.

As has been evidenced through the last national sample exam and the comments regarding educational implementations as a result of the global covid-19 pandemic, the average learning in mathematics and reading comprehension in Peru by children between 6 and 8 years old does not present the expected results, In addition to that it was investigated that at that age children do not focus fully on the learning taught by their teachers, because they are at an age of social interaction and do not pay the necessary attention to educational issues because the teaching method does not cause them impact and entertainment to retain information in the long term and it is essential that the first years students are nourished with The bases so that in the future they do not have learning problems in the face of the increase in topics and difficulty of these. That is why it is planned to develop educational software to improve the understanding of mathematics and reading through didactic learning methods for the easy capture of the child and so he can interact with what he is learning, so that the information is retained through the moment of entertainment he is receiving at that moment.

With this software we want children to refresh their way of learning since at this age it is common to present lack of interest or deconcentrating with their learning and so that they do not see it as simply sitting down to listen to what the teacher tells them, a software will be offered which will start with a questionnaire to analyse the level of studies in which the child is in order to provide content of subjects adapted to their level (result of entrance test), in summary we hope to feed those desires of wanting to learn new things and through the section of reading and basic mathematics we will improve their development in life in the future before any educational circumstance or related to the understanding of information, and thus we will nourish the foundations they need to study their future subjects satisfactorily.

The technologies that will be present for the development of the software in this work are the following: The Visual Studio Code this is a code editor that will help us to develop the languages that will be implemented in this project, HTML 5 for the structure, CSS3 for the layout of the program and JavaScript for the animation, functions, etc. And finally, a database management system that would be SQL Server allowing to store all the necessary data.

## **2. Methodology**

### *2.1 Scrum Methodology*

To have an optimal development of the project we will use the agile Scrum methodology, because it gives us advantages that are presented, first, at the time of including the client in the work process, second, in the structure of what each member of the team must do, so that it is easy to adapt to the methodology, thirdly, In the labour inspection that through its events such as daily meeting, sprint review and retrospectives will know if the expected results are being presented, finally, in the

willingness to change on the characteristics of the product. And apart it is known that this methodology achieves synergy among the members of the team, thus achieving the expected result in any event of this methodology [14].

## 2.2 Principles of Teaching Mathematics

- i. **Equity:** A good math education requires equity, high expectations, and strong support for all students.
- ii. **Curriculum:** A curriculum is more than a collection of activities. It must be coherent, focused on important mathematics and articulated on many levels.
- iii. **Teaching:** teaching. Effective mathematics education requires an understanding of what students know and need to learn and therefore challenges and supports them to learn it well.
- iv. **Learning:** Students must learn mathematics by understanding it and actively building new knowledge from previous experience and knowledge.
- v. **Assessment:** Assessments should support important math learning and provide useful information for both teachers and students.
- vi. **Technology:** It is an integral part of teaching and learning mathematics. It influences the mathematics taught and inspires student learning.

These six principles describe essential issues that, although they are not, are described as characteristic of school mathematics, it is profound related to mathematics programs [15].

## 2.3 User Story Creation

As can be seen in Table 1, the user stories are being presented, which allows us to better visualize the features that the users who will have access to it want to be implemented in the software.

**Table 1**

User Stories

N°	User Stories
1	As a student, I want educational software with a simple and dynamic interface.
2	As a student, I want educational software to have innovative tools.
3	As a teacher, I want this educational system to be able to serve students to improve their abilities, creativity and skills.
4	As a student, I want this educational software to allow me to solve math problems in simple but understandable steps.
5	As a student, I want this educational software to allow me to improve vocabulary, reading comprehension or phonological problems.

## 2.4 Flowchart

Next, the steps to follow in each process will be explained in detail:

- i. **Do you have an account?:** On the one hand, if you have an account already registered you will not have to perform any new steps, you will simply be shown the main panel of the web system.

On the other hand, if you do not have an account, you will first have to register by entering your personal data, data from your educational centre and data from the teacher in charge, the second step after completing your registration is to solve the entrance tests that will test the skills with which the child is before developing and completing the course.

- ii. Enter the main page: After completing any of the above processes, you will be shown the main page of the personalized educational web system, with the data of the active courses, data on pending tasks, topics to unlock, etc. Except for those who have just registered who will not have general data on the screen and will only have the personalized course viewing section.
- iii. Visualization of the personalized course: In this section you will have the views of the topics that were generated automatically after having solved the entrance tests at the time of registering in the educational web system.
- iv. Do I finish the course?: If the student completed the course he will be presented with 4 last activities:

First you will be asked to answer a questionnaire on how to improve the visual section of the page, then you will be asked to send us some didactics that the minor wants to be implemented in the web system, then you will be presented with other didactics already suggested by other students to check if they like it and make the final decision to enter it into the courses, and finally, an overall score of the educational web system, taking into account the courses, questions, dynamics, etc.

To easily understand the order of the processes of our web system, a flowchart was developed, which is shown in Figure 1.

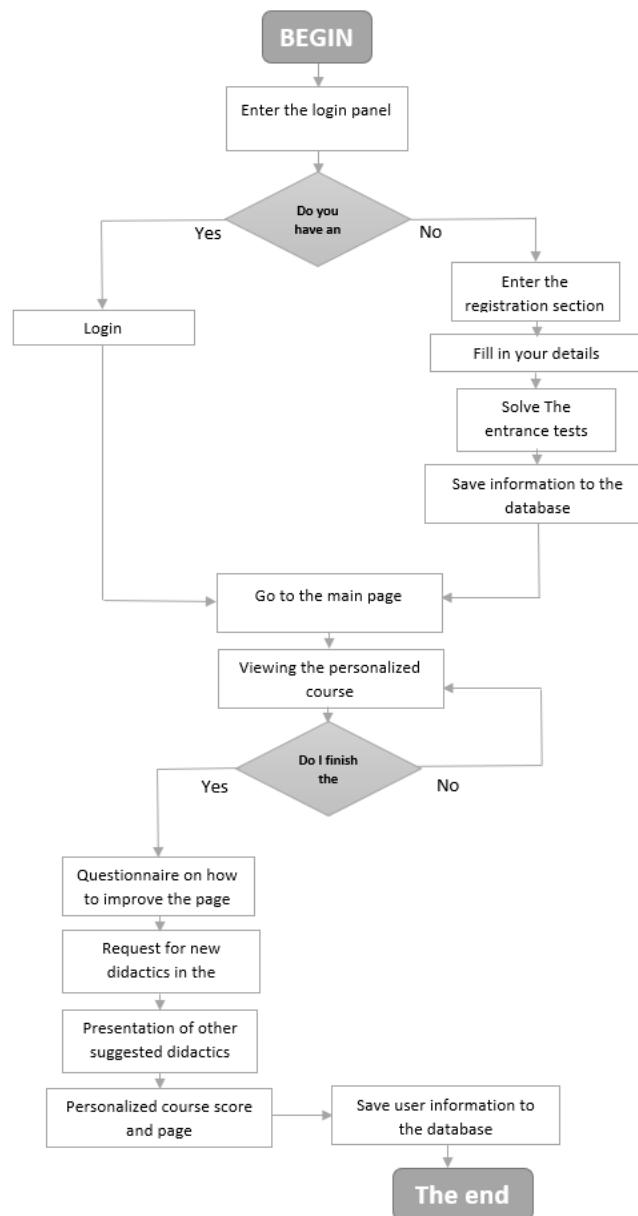


Fig. 1. Flowchart

### 2.5 Functions for the Creation of an Educational Software

In Figure 2 it can be seen that for the creation of an educational software it is necessary to know its various functions including the formative function where we have to structure the information based on reality, the instructive function allows the orientation in the learning of the students in order to facilitate their educational objectives, The expressive function where students must have interaction with the computer, the innovative function that educational software for both the area of mathematics and reading comprehension can attract the attention of the child through new tools for the development of mathematical or reading problems, the creative function that the creation of this educational software allows the student to generate new skills and abilities.

### Funciones del software educativo

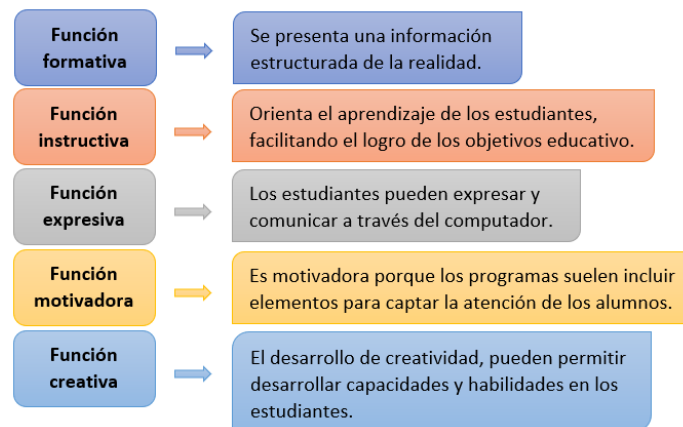


Fig. 2. Methods for creating educational software [16].

### 2.6 Analysis of Students' Prior Knowledge in Reading Comprehension

At the time of analysing and previously evaluating the design of the interface through studies, tests for children from 6 to 8 years of age, first, we will prioritize conducting some exams prior to accessing the main interface, to obtain data from the student on their phonological knowledge and verbal memory, to have the knowledge about any difficulty that could present when continuing with the use of our software, And through this test of phonological knowledge and verbal memory we will present the problems of the software adapted based on the result obtained by the student in the entrance test.

Figure 3 shows the percentages of the sections in which reading problems occur with respect to phonological knowledge:

- i. First, in the phonematic perception that deals with the production and perception of the sounds of a language it is seen that 12% present problems in this case.
- ii. Second, with auditory differentiation that deals with the ability to differentiate all the sounds presented, in the same way 12% presented problems at this point.
- iii. Third, in the rhymes and alliterations that would be sounds of letters that are repeated or seem between words, in this case it is seen that 13% present problems.
- iv. Four, with the syllabic consciousness that tries to discard syllables that do not correspond to a word, as a result 25% presented problems and the intra-syllabic was 13%.
- v. Finally, in phonemic awareness, which deals with distinguishing the sounds presented, it can be seen that 25% presented difficulties.



Fig. 1. Statistical data of phonological knowledge



Figure 4 shows the percentages of sections in which reading problems occur with respect to verbal memory:

- i. First, the vocabulary in which the knowledge of a certain number of words is tested, as a result 16% presented diffusions.
- ii. Second, RAN which is a measure of data processing speed in a person, in this case a child, you can see that 25% presented problems in this section.
- iii. Third, verbal comprehension that as the name says is about the comprehension of the words in a text, as a result 16% presented problems.
- iv. Fourth, morphological awareness that deals with understanding the formation of words and manipulating their composition, at this point 18% presented problems.
- v. Finally, verbal working memory that deals with reflecting, asking questions and solving problems, here 25% present difficulties.

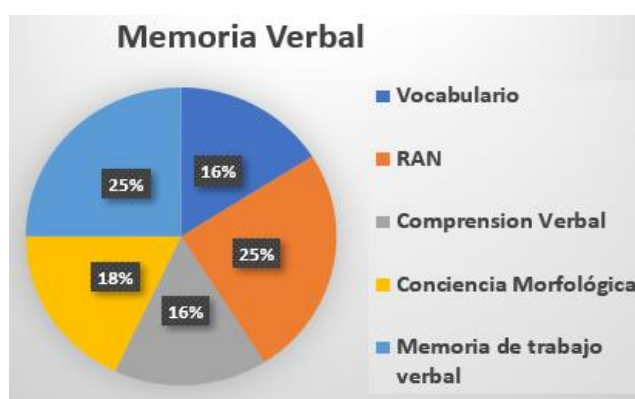


Fig. 4. Verbal memory statistics

## 2.7 Teaching Method in Children from 6 to 8 Years Old in the Area of Mathematics

Why learn Mathematics?: It is necessary that children can learn the area of mathematics from the first grade or also if possible before finishing their initial begin to have a base, since the use of mathematics is found in various types of human activities, whether in sports, in family activities, school, in the field or in everyday life this will be very helpful in order to stimulate cooperative work, participation, the development of new skills that the child will discover over time in terms of learning. For example, a child in the first grade of primary school who is approximately 5 to 6 years old must already be able to add, subtract up to a certain minimum amount, identify geometric figures, learn to measure either with the use of a ruler or a ribbon, identify how much is the value of each coin, also in identifying the time either naming or describing it. Figure 5 shows an example of teaching for children.

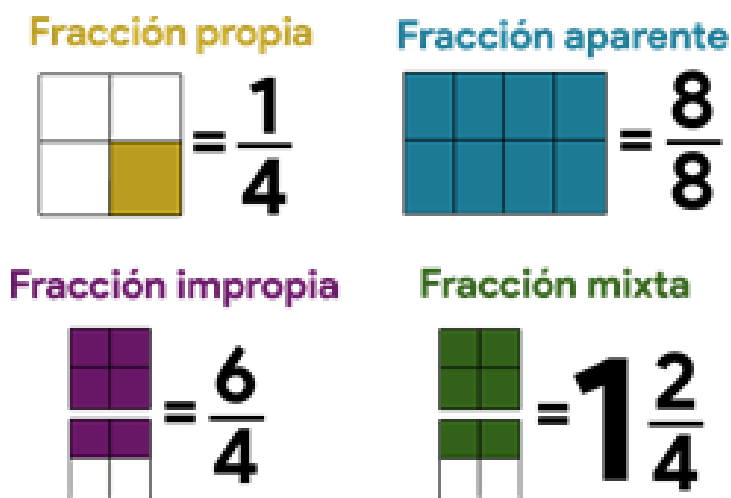


Fig. 5. Example of teaching regarding Time Identification

As for children of 7 years of age can be taught a higher level than what they already learned in their previous school year, which is why they are stimulated even more in the area of mathematics since they can add and subtract high numbers, not only in teaching them the basis of multiplication and division, but with not so high numbers, also to identify the angles of the geometric figures, also in understanding and identifying the even and odd numbers. Figure 6 shows another example of teaching for 7-year-olds.



Fig. 6. Example of teaching in the identification of angles

Already in children of 8 years of age to already have a base of learned in their first two years in terms of the area of mathematics and can be stimulated even more, by having a base in addition, subtraction, multiplication and division will be allowed to be easier to solve exercises with high numbers not exceeding 100 in terms of multiplication and division, Also at this stage the student already passes to a new level since he will begin to learn the fractions, identify the rectangle, etc. Figure 7 shows another example of teaching level, but for children of 8 years of age.

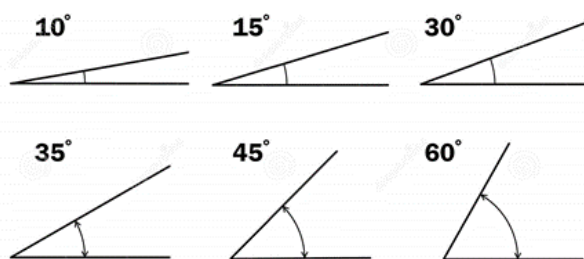


Fig. 7. Example of teaching about fractions

Finally, it is seen that at each stage of learning the student is necessary to have a base so that he can move on to the next level of learning, since this will be essential for them to discover new skills and abilities of each of them and these levels can be seen in detail in Figure 8.

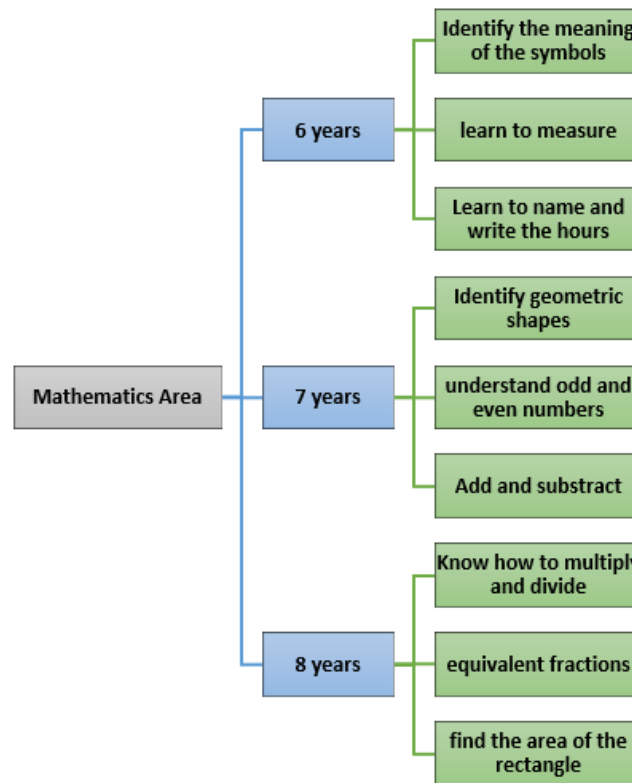


Fig. 8. Scheme of teaching children from 6 to 8 years old

### 3. Results and Discussions

#### 3.1 Software Development

In the development of the educational software prior to this we create prototypes of the project and guided by them we make the official section that will be shown below.

- i. **Login:** The student will have access to the educational software system through a login in which they will be asked for the following user and password information, if in this case you do not have an account you can register through the option does not have an account yet, if in such case you do not remember your password will be the option forgot password in which you will be provided with the following user and password Help to recover or change to a new password, if in such a case the user writes his data erroneously will leave a notification saying data not entered correctly, if in such case the user entered all the fields correctly will give him entry to his virtual classroom with his courses in which he is registered to learn and develop practices in the area of mathematics and reading comprehension. The login section can be seen in Figure 9.

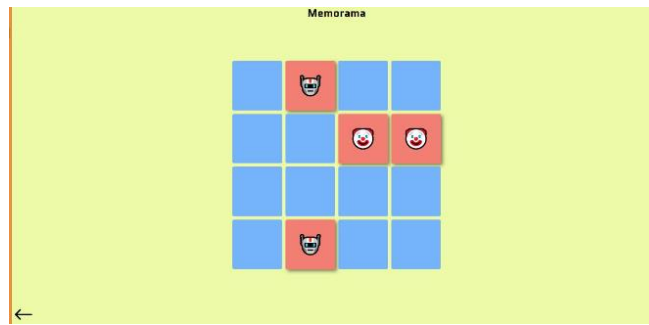


Fig. 9. Login section

- ii. **Courses:** In this part you can visualize how the student has had access to his virtual classroom by correctly entering his data as seen there are two icons that correspond to the courses that the student is taking charge to learn, among these courses the student will have different types and interactive methods to be able to have an easy and innovative teaching. The course section can be shown in Figure 10.

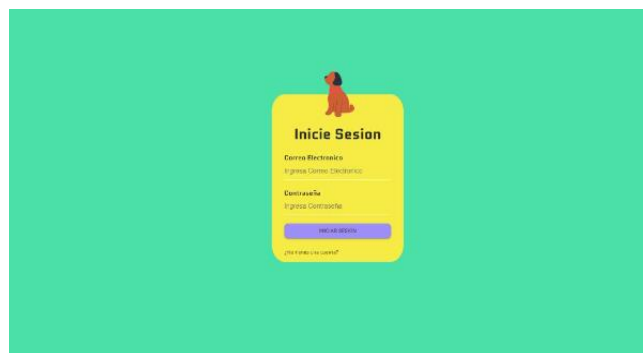


Fig. 10. Interface for entering available courses

- iii. **Memory Game:** One of the first games implemented is one of memory, called Memorama, which will allow children to identify a figure so that later to reveal more, remember the positions of two equal images and select them to discard that option and so on until completing the whole picture, this was created in order to increase the concentration of the child and strengthen his memory. The game can be visualized in Figure 11.



Fig. 11. Memory game section

- iv. **Sum game:** In this section we have the second didactic of the software, which is that the child can learn to add, in the event that this well his answer will pass to the next and if he does not mark the error, also if he does not manage to answer in time, since there is a time limit there is a button that allows him to start the game again. As it would look the addition game is shown in Figure 12.

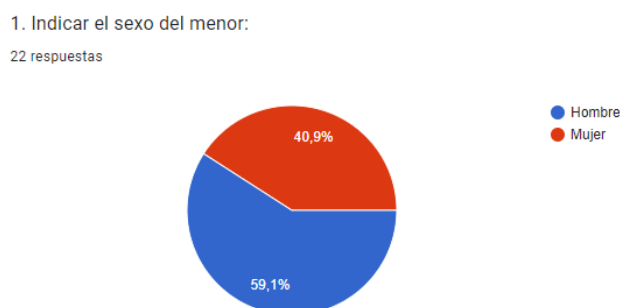


**Fig. 12.** Addition game section

### 3.2 Survey

To know what is the reception that our project would receive, in addition to being able to receive advice to improve it, a form was created in which different questions were proposed regarding what they thought of the first games of our project, the interface, among others and how we can improve them, then the questions of the submitted form will be presented.

In Figure 13 you can see the first question of our questionnaire, in this it was possible to identify that 59.1% of men and 40.9% are women, with this we can specify that there are more men than women with respect to the development of the questionnaire.



**Fig. 13.** Sex of the child

In Figure 14 the second question is shown, in this it was possible to identify that the relative who helps his child the most is the mother with 36.4%, while the brothers are the second with 27.3%, while the aunt and friends are tied with 13.6% and, finally, it was possible to know that 9.1% are helped by other responsible for the child. These data give us to understand that children have more affinity with mothers and siblings, thanks to this we can plan a section of interaction between parents of the child or plan didactics between them, among other activities oriented to a dynamic knowledge competence.

2. ¿Que familiar le ayuda para el aprendizaje con el software educativo?

22 respuestas

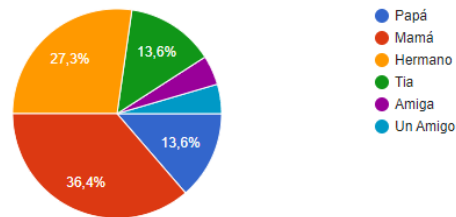


Fig. 14. Family member at the child's disposal

In Figure 15 the third question is shown, in which it was asked to answer what was the age of the minor who used our software, in order to know in which age range, they were most interested in the project and the results were that children from 5 to 6 years and 7 are the most interested with a tie of 36.4% in both parts, while 22.7% are children of 8 and 9 years, in this case the most interested age range is between the age of 5, 6 and 7 years.

3. ¿Cual de las siguientes categorias corresponde a su edad?

22 respuestas

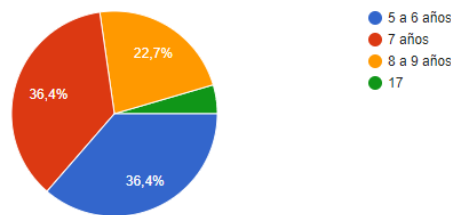


Fig. 15. Most interested age

In Figure 16 the fourth question is presented, in which it was possible to identify that the device most used by the minor is the computer with a wide margin of 54.5%, while the other most used device is the cell phone with 27.3% and that the tablet is also a useful device for 18.2%, This helps us to know how to adapt our games and didactics to the most used device, so that it does not present errors or discomfort with formats that are better displayed on other devices.

4. ¿Que dispositivos va utilizar?

22 respuestas

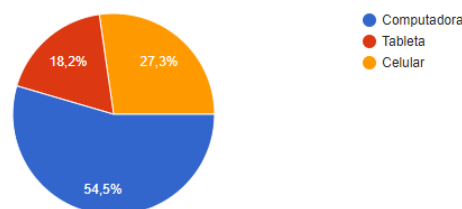


Fig. 16. Devices to be used

In Figure 17 the fifth question is shown, in which it was possible to see that 68.2% thought the login section of the educational software was good while 22.7% thought the educational software section was excellent and that 9.1% thought the design was regular. This information gives us to

understand that the design of the system is on the right track and that at present it is being liked by children, on the other hand, do not leave aside that small percentage that seemed to regulate the login design and ask for your comment on how to improve it to your liking.

5. El apartado de inicio de sesión del software educativo es:  
22 respuestas

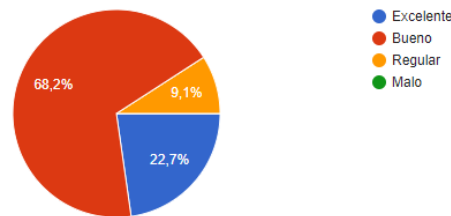


Fig. 17. Login section is acceptable

Figure 18 shows the sixth question, in which it was possible to identify that 40.9% liked the design section of the software category, while 31.8% still found it excellent and finally the 27.3% vote that seemed regular, with these data we can deduce that the categories implemented so far are those necessary for the majority of respondents, but the percentage that voted for "Regular" wants more variety of categories in the software.

6. ¿Que tan satisfecho se siente con las categorías del software educativo?  
22 respuestas

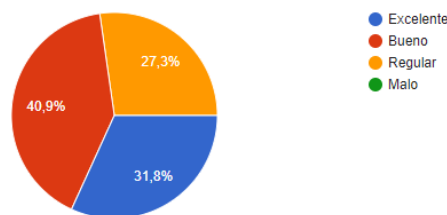


Fig. 18. Opinion on software categories

In Figure 19 the seventh question is presented, which shows that 50% of respondents answered that the first game of the software was very good, while 40.9% thought it was excellent and 9.1% believe it was very fair, this information gives us to understand that most children liked the first game implemented in the software that will help exercise their brain and improve his memory.

7. ¿Que les parecio el primer juego del software educativo?  
22 respuestas

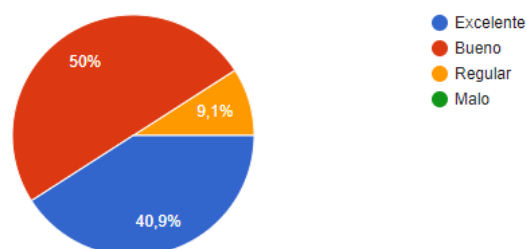
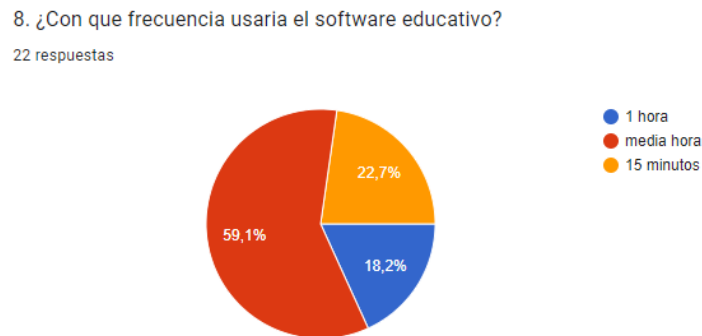


Fig. 19. Opinion of the game memorama educational software

Figure 20 shows the eighth question, in which it is seen that most children are interested in educational software since 18.2% would find it interactive and would use it for an hour, while 22.7% would only use it for about 15 minutes, and 59.1% would use it for half an hour. These data give us to understand that the educational software would be used by most students and that we have been able to capture their attention so that they interact with our project for half an hour or more.



**Fig. 20.** Frequency with which you would use the software

Figure 21 shows the ninth question, in which it is seen that children are committed to the implementation of this software for their learning since 45.5% feel somewhat committed, 40.9% are neutral, 9.1% are very committed. With these data we can deduce that we have the interest of more than 50% of respondents and with the other percentage that is between little committed and neutral wants to tell us that one of our goals is to cause interest for the learning of the courses assigned to failed, and we must analyse in which aspects of the software we have not been striking enough to be able to reach that part of respondents and capture the interest in our project.



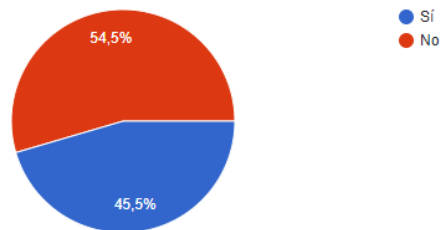
**Fig. 21.** Commitment to software

Figure 22 presents the tenth question, in which 54.5% of respondents had no difficulty in using the program, while 45.5% had problems with it. With these data we can deduce that there are bad distributions of data in the interface or the games are not well explained or the learning topics are not entirely clear, there are different points in which to inspect to know what are the difficulties they present to understand or navigate the software, since it is a worrying percentage that 45.5% of respondents present difficulties to use the system.



10. Tuvo alguna dificultad para utilizar el software educativo

22 respuestas

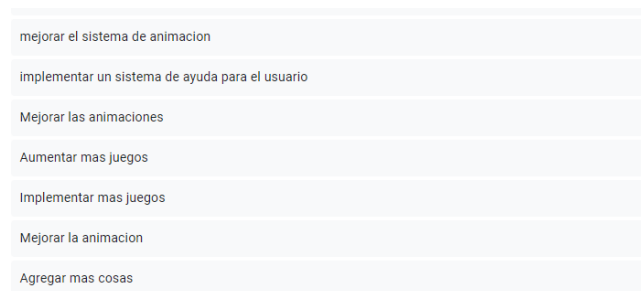


**Fig. 22.** I have some difficulty with the software

Figure 23 shows the eleventh question, in which the comments of the respondents are visualized to see what they can recommend us or in what aspects they want us to improve with respect to our software.

11. ¿Que nos puede recomendar para mejorar el sistema del software educativo?

22 respuestas



**Fig. 23.** Feedback comments

### 3.3 Discussion

While this project is being developed, different observations came to light by each of the members, then it will be explained in detail.

- i. First, we jumped out that our project has a good base, but it still does not compare with the works of the authors on which we are based, we still need to implement many features that we had planned, but they did not fit with our structure and we decided to remove them.
- ii. Secondly, our approach is not yet as ambitious as we expect, since we will only focus on a basic age range that equals 6 to 8 years, in this aspect we would like to expand to obtain greater reach and reception.
- iii. Thirdly, the issue of facilities in our proposal for inclusive learning methods that we had planned is a section that we have not yet implemented, but it would be something striking for our system, since as we think from the beginning learning should reach everyone with the facilities offered by the technologies of the present and in this case more the internet.
- iv. And finally, the dynamics for the recruitment of children so that they are attracted to learning, little by little we create prototypes of didactic and striking mini-games but they are not yet implemented, since our educational project was designed precisely to attract children to learning with the help of a new learning method to train people with solid

knowledge in the foundations of studies, which are what we focus on which are the math and reading comprehension courses.

#### 4. Conclusions

The present work achieved the planned objective mainly, which would be to capture the attention of minors so that they want to learn in different ways, indirectly through games and also in a typical way with the format of questions and answers to provide them with the evidence that if they use our mini-games as a learning method, they will be able to solve any type of problem in the typical format. Our project arose precisely about talking about neutral teaching towards children who attend in their early primary school, since they are the first years of interaction that children have with general courses, with this idea we decided to project a new method relying on the internet to reach the majority of the audience and thus achieve the aforementioned that is to forge the children in the general studies that are mathematics and comprehension Reader so that they understand and stay with the knowledge, in addition to strengthening their brain.

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