

STUDY OF TABLETS'S USE LIKE TOOL IN THE PROCESS OF EDUCATION - LEARNING FOR STUDENTS THERE GIVES 4 ° COURSE OF PRIMARY EDUCATION

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Summary

The group of investigation Social Technology of the ULPGC signed an agreement of collaboration with the Council of Education of the Government of Canarias to realize a study on the use of the tablets as tool of education - learning, orientated to 4 ° of primary and to special education, with the aim to analyze the benefits of the technological tools in a an educational center, concretely in the CEIP Salvador Manrique de Lara and production of a report of results that allows to the teachers to possess a guide of action and recopilatorio of apps free indicated for the work of the competitions in matters like mathematics, English and special education.

The above mentioned study has fulfilled during the course 2013-2014, possessing the collaboration of the persons in charge of mathematics and English of 4 ° of primary and of special education. The steps that we have followed in this study have been:

1. Formation before students of Formation of the Professorship on the use of the tablets and the digital slate
2. Study of the paragraphs and competences that the children must acquire in 4th of Primary Education
3. Selection of competences at which one is going to be employed
4. Search of apps free to work the selected competitions
5. Production of the workshops to give. The above mentioned workshops have centred on Mathematics and Englishman, for 4th of primary, and different workshops for special education
6. Imparting of the workshops, having a weekly hour for every matter.
7. Analysis of the progress in the chosen matters and evaluating the

- usefulness of the technological tools in the learning process.
8. Evaluation of the results.
 9. Detection of the technological needs in each of the matters
 10. Production of questionnaires of satisfaction for children and teachers
 11. Interviews with teachers and board of the center
 12. Interviews with the children, in groups of 5 to create groups of debate and to analyze the experiences that have experimented and his own conclusions.

In these moments we are in the phases 11 and 12 of interviews both to the children and to the educational equipment, for the production of the final conclusions of the project.

1. INTRODUCTION

The topic of the present work has been the study of the use of technologic tools in the process of teaching and learning in the 4th school year of Primary Education. It comes from the agreement signed for the Social Technology Investigation Team from ULPGC and the Regional Education Ministry of the Canary Government. With this agreement of collaboration we expect to make a study about the use of tablets like teaching-learning tools, oriented to 4th of Primary Education, English and Special Education.

Social Technology Investigation Team (DTS) is a project whose main objective is establishing the basis, to make Canary become a prestigious technologic center referring to information technologies applied to psychosocial and health problems, advising to the potential entrepreneurs in the design, elaboration and viability of business. Focusing on theoretical aspects from this investigation, last 31st of October of 2013 an agreement of collaboration was signed among the Area of Educative Technologies and the Educative Program and Extracurricular Activities Service from the General Management of Ordinance, Innovation and Educative Promotion from the Regional Education Ministry of the Canary Government, and the Departmental Service "Computers Consultancy" from the Computers and Systems Department from ULPGC, inside the investigation project: Social Technology Investigation Team.

In a society which the English level and the use of new technologies are emerging is hugely important to teach to be competent in these skills since the school age. There are many schools that give a greater importance to projects like "Content and Language Integrated Learning (CLIL)", or like "Classroom Medusa". On the one hand, with the project CLIL we can make pupils of Primary participate in some subjects in English. On the other, the Classroom Medusa foments the use of computers like tools to search information, to work with text processors, etc.

2. THEORETICAL AND CONCEPTUAL FRAMEWORK

In a so purely technologic society like which we live in, it is essential the knowledge of tools like the computer, the tablet, the smartphone, surfing the internet, etc., since the school age. Although all technologic devices have good characteristics, tablets have been fundamental for their easy use, their simplicity to be transported, the best vision and the use of a touch screen and, to some extent, for being one of the most recent devices.

Tablets are on the way between mobile phones and laptops, furthermore they are intuitive and fast tools that don't need instrumental learning (Ortega, 2011). As we are saying, they are very useful, but could they adapt to the school reality? The inclusion of individual digital advices for pupils and teachers from different educative levels is becoming a majority tendency in the current governmental politics of digital inclusion and improvement of educative opportunities of educative systems.

3. DEVELOPMENT OF THE PROJECT

The first to have into account is that tablets haven't been included in the teaching-learning process without being thought, that is why we always had like reference the evaluation criterions from every subject and, above all, the basic competences. Basic competences are the set of knowledge, skills and attitudes that pupils must achieve when they finish the basic education to manage their self-fulfillment and personal development, to exercise the citizenship, to join adult live fully and to be able to continue learning along life (Organic Law 2/2006, from 3rd of May, from Education).

There are eight basic competences: competence in linguistic communication, mathematic competence, competence in the knowledge and interaction with physical world, information treatment and digital competence, civic and social competence, cultural and artistic competence, competence to learn to learn and autonomy and personal initiative.

The study is made in the Primary School Salvador Manrique de Lara during the school year 2013-2014, having the collaboration of the tutor of 4th of Primary, the English teacher of the same grade and the responsible of Special Education. In the case of the present project, we will focus on the area of English. In addition, we have the collaboration of other two students from ULPGC who were in charge of Math and Special Education to also make their degree's end works. The steps to follow to achieve the present project are:

1. Training for ULPGC students who participate in the Project about the use of tablets and their working.
2. A previous meeting with teachers of Primary School Salvador Manrique de Lara and students from ULPGC that participate in the Project.

3. The study of headings and Basic Competences which we are going to work.
4. The search of free applications to work the selected headings and download them in the tablets.
5. Weekly planning of the work and establishment of days and hours of the use of tablets with pupils.
6. Weekly activities and checking of pupils' progress.
7. Elaboration of a final report about the use of technologic tolos in the learning of Maths, Language and English in students from 4th of Primary Education and Special Education.

To start the study, we have counted on 12 tablets, a digital whiteboard, a computer and the 4th of Primary's classroom. Besides, we have been given spaces for meetings, downloads of apps and others in the same educative center, in the School of Computer Engineering and in the Faculty of Teacher Training, both of them from University of Las Palmas de Gran Canaria. To pick the information, in the end of the study a questionnaire was given to the English teacher to know her opinión, and we made interviews to pupils in little groups of debate. Both questionnaires with their respective questions can be found in the annexes of the present degree's end work.

4. OBJECTIVES

The main objective of Social Technology Investigation Team is the study of the use of tablets in the education like tool for teaching-learning process, concretely directed to 4th of Primary Education and Special Education, and the elaboration of a report of results that allows teachers count on a guide of action and compilation of free apps indicated to work the competences into areas like Maths, Language and English.

5. PHASES

The first phase was instructive for students from ULPGC. We were informed about what they wanted to do and with which objectives. After knowing and accepting them, we were trained to know how to do the best with tablets and apps.

-Afterwards, along the first trimester, each student went like free listener to classes related to the subject he was going to give. The objective of this step, besides making a evaluation of the english level of the class, was knowing their routines a initiating little by little in the world of tablets in order to not alter their daily routine not supposing a big change to start the use of tablets in the second trimester.

-Then is when the team formed to make the study met to share evaluations, experiences and opinions in order to have all ready for the most

important part of the study: the introduction of tablets in their daily routine.

-After having looked the theme which they were going to give along the second trimester and matching the Basic Competences and headings, they downloaded and installed conscientiously the apps that would allow a better advance in different subjects.

The second phase was the use of tablets in select subjects.

-Along the second trimester, some classes were used, respecting the daily dynamics of the class group, to initiate little by little the use of tablets sometimes combined with the use of the digital whiteboard.

-Between classes, the team met once a week to match information, to share experiences and to propose improvements. Obviously, this has required a previous individual preparation, in which students evaluated the app/s that were more suitable depending on the part of the trimester where they were and the part of the theme they were giving.

The third phase focuses on the evaluation of the experience.

-Once the practical part was finished, an interview was given to the teacher by email to know her opinion in general about what we did and interviews were given to the pupils in little groups inside the school center.

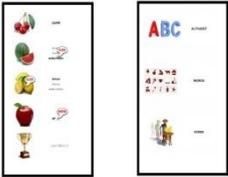
-In relation to incidents, we add that there weren't barely, except some technical fail in some electronic device that could be resolved almost immediately without incidents or repercussion.

-To conclude, the last piece of this fantastic and labourious puzzle has been this, a report where to pick all parts of the study.

6. SUMMARY TABLE OF USED APPS

We have considered opportune the presence of a summary table to summarise generally the worked apps, connecting them to what it is worked with each one in headings and basic competences. In addition, there are images showing how it appears when you look for it to make easier the search. All used apps are for the second course, in other words, the third and fourth year of Primary Education. To understand the table better, headings contemplated into evaluation criteria of every subject are specified. (See table 1)

APPs English 4th of Primary Education

Name	Icon	Headings	Basic Competences
LEARN AND PLAY ENGLISH		4 and 5	Linguistic communication Learn to learn Digital
LEARN ENGLISH FREE		4 and 5	Linguistic communication Learn to learn Digital
PLUME'S SCHOOL. SAVING CHRISTMAS		5, 8 and 9	Linguistic communication Digital Civic and social Cultural and artistic
PRACTICE ENGLISH GRAMMAR		1, 4, 5 and 7	Linguistic communication Digital
FUN EASY LEARN ENGLISH		1 and 5	Linguistic communication Learn to learn Digital
POLARIS OFFICE		4	Linguistic communication Digital
NIÑOS A APRENDER ROPA		7	Digital

APPs Special Education

Name	Icon	Headings	Basic Competences
KIDDO MATH	 KiddoMath	1, 2 and 9 maths headings	Mathematic Linguistic communication Digital.
KIDS MATH CHALLENGE	 Kids Maths Cha	1, 2 and 6 from maths headings	Mathematic Linguistic communication Digital.
JIGSAW PUZZLE FOR KIDS	 Jigsaw Puzzle	9 from maths headings	Mathematic Linguistic communication Digital.
ORTOGRAFÍA	 Ortografia	4 and 9 from language headings	Linguistic communication Digital.
PALABRAS DOMINO	 Palabras domin	4 and 9 from language headings	Linguistic communication Digital.
KIDS DOODLE	 KidsDoodle	It is not directly connected to evaluation criteria from headings, but it can be used for any kind of activity due to its flashy format	Artistic Digital
JUEGO DE MATEMÁTICAS: ZEUS	 Juego de Matem	1, 2 and 6 maths headings	Mathematic Linguistic communication Digital

<p>AHORCADO</p>	 <p>5. Ahorcado Macaque</p>		<p>1, 8 and 9 from language headings</p>	<p>Linguistic communication Digital</p>
<p>TRAZA LOS NÚMEROS</p>	 <p>Traza los números</p>		<p>1 from maths headings</p>	<p>Mathematic Digital</p>
<p>MATH CLAW MACHINE</p>	 <p>Juegos Matemáticos</p>		<p>1, 2 and 6 from maths headings</p>	<p>Mathematic Digital</p>
<p>KIDS MATH</p>	 <p>Kids Math</p>		<p>1, 2 and 6 from maths headings</p>	<p>Mathematic Digital</p>
<p>MATH VS UNDEAD</p>	 <p>Divertido Juego</p>		<p>1, 2 and 6 from maths headings</p>	<p>Mathematic Digital</p>
<p>KID MATH</p>	 <p>Kid Math</p>		<p>1, 2, 6 and 9 from maths headings</p>	<p>Mathematic Digital</p>
<p>SOPA JUNIOR FREE</p>	 <p>Sopa junior Free</p>		<p>9 from language headings</p>	<p>Linguistic communication Digital</p>

TANGRAM HD			1 and 9 maths headings	Mathematic Linguistic communication Digital
FLOW FREE			9 from maths headings	Mathematic Linguistic communication Digital
GAME-OF-GOOSE			2 and 9 maths headings	Mathematic Linguistic communication Digital
MAGIC WINGDOM			1 and 9 from maths headings	Mathematic Linguistic communication Digital

7. CONCLUSIONS

The conclusions of the study have been very good. Firstly, we have seen the influence of tablets in the learning-teaching process, we have been participants of what means take them to school reality, we have checked beside teachers how results have improved from the academic viewpoint and we have helped children to see tablets like something more than a toy, to see them like a work tool as useful as a dictionary, a calculator or a ruler.

But it also has its limitations, among others the possibility to be able to work with more and better applications, because some of them were for a fee, others were if you wanted to obtain the complete version... Furthermore we have the didactic aspect, because frequently they seemed to be created with a playful objective exclusively more than didactic. Perhaps it would have been appropriate the teaching of the tablet working to teachers from the school, so even they could be more direct participants.

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Por otra parte, se visitó la siguiente página de internet para recabar más información sobre las rúbricas:

<http://www3.gobiernodecanarias.org/medusa/ecoblog/esuasan/rubricas-o-matrices-de-evaluacion/>