THE USE OF DISTANCE LEARNING IN THE EDUCATIONAL PROCESS CONTENT AND STRUCTURE OF EDUCATIONAL PLATFORMS-ANALYSIS OF THE PLATFORM EDUCANS

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ABSTRACT

This work provides some considerations that complements the scarcity of researches in this field of knowledge of e-learning specifically refered to secondary education.

Distance training programmes (both open source code and not) are becoming increasingly more popular, especially in higher level education. However, there are very few cases of these types of distance learning tools being directed at secondary school pupils via a form of political support. The platform is divided into areas and levels which house the minimum learning requirements which have been stipulated by the Spanish government in the various areas of Spanish language, Mathematics and Natural sciences for the four levels of E:S:O (Compulsory Secondary Education).

The platform EDUCANS is a guaranteed success and the object of this investigation.

Keywords: E-learning, Distance Learning, Secondary Education, Intermediate Education, Open Learning, Online Learning.

INTRODUCTION

Presentation

The current social habits, being immersed in all sorts of information and considering the indisputable growth of the Internet, and therefore the educational potential that distance learning and online learning have, the researchers find themselves with a classic conflict of interests.

Such educational platforms should have a certain structure, a clear and accessible appearance for the use of the individual, or at least so that the most relevant components should be focused on the content. If you wish to add additional and potentially confusing elements we could say that the platform should still awaken interest amongst its users, not only for teachers but also for students.

This final comment of discussion, if anything, has more importance (García y Sáez, 2002) when the objective of the platform is to reach out to adolescent pupils. In many cases they have little enthusiasm for their studies, but most likely have a superior level of information technology to that of their own teaching staff.

From this point of view, (Castells, 2000) it perhaps allows us to question if there is any online platform that does in fact obtain its ability to awaken interest in the students as well as in the teaching staff, whilst in keeping with appropriate content and structure at secondary education level? Moreover, would the use of such a platform be able to achieve better academic results from those who use it versus those who don't?

With such concerns to face let us think about the analysis of the platform 'Educans' (www.hispanoaula.com). A platform that from the beginning had a vocational combination – for the subjects of Language, Mathematics and Science -, and a will to present in an organised and methodical way the content that the Spanish Ministry of Education and Science had set out as minimum requirements for all students of compulsory secondary education, published in the implementing Law 1007/1991 on the 14th June.

In this sense, it is a unique platform, given that until the present moment no other platform has been created with a content worked on in such a systematic way and formed according to the established decree.

Therefore, there are two objectives for this investigation:

- to demonstrate that it is possible that a platform awakens interest in not only students but also in their teaching staff and

- to demonstrate that the use of that platform is able to achieve better academic results for those who study with it systematically to those who continue with a more conventional learning process.

Both objectives can be reached, as was demonstrated in the defence of this investigation, which is part of the thesis «Distance Learning in educational processes. Educans' answer to an open platform for secondary education», recognised as deserving the highest rating in the Spanish University of Huelva.

In reality, the «Educans» platform exceeds, at least, the creation, organisation and coordination of the educational content designed for pupils in their four years of compulsory secondary education in Spain. That involves the following subjects: Mathematics, Language and Sciences –including Physics, Chemistry, Biology and Geology– because in addition to these there is multimedia theory (more than 1,400 pages) together with its supporting material of exercises (more than 9,000 pages). Both of these count as powerful administrative tools that allow its different types of users to complete and modify exercises and material, to be assigned with personalised tasks, review the results of the different academic performances, personalised communication with the pupils etc. All possibilities are feasible as long as they offer a positive 'plus' in terms of the exceptional interest for the learning experience.

1. Investigation

Technological advances (Martínez, 2002), (Alcantud, 2000), (Cabero, 1996) are without a doubt very quick, and a production from 3 or 4 years ago could today easily be branded as overnight (Comisión Europea, 1998: 1), due to its structure as well as for the programming systems or graphic appearance, to cite some examples.

However, this problem is overcome with this platform; the content, structuring, graphics, etc. continue being up-to-date and highly valued by its users, because those who created the material were clear from the beginning that the intention was not to create nor to compete with products by multinational software companies, but rather to contribute a didactic and teaching knowledge that has allowed this work to be perfectly valid today.

The work material and methodology that this platform propose are designed with a view to considering the teacher more like a guide in the educational process than as the administrator of knowledge and, in this last instance, in both the aforementioned cases, these factors have always been considered as a tool and complement to the teaching labour and never as substitutes for it.

This investigation is principally conducted under a quantitative paradigm and its aim is to analyse and explore the teacher and students' evaluations of the Educans educational platform, with respect to its technical, aesthetic and pedagogical aspects.

As regards the way in which the date has been collected the authors opted for using questionnaires, which they considered to be the most suitable medium, given the objective of the research.

In order to carry out the research, the researchers referred to wide sources, but in the end the principal one was the webpage of Doctor Pere Marqués, Professor at the University of Barcelona: http://dewey.uab.es/ pmarques/ evalweb.htm and http://dewey.uab.es/pmarques/ evaport2.htm .

The questionnaire covered the following fields:

- Functional aspects of the educational platform.

- Technical and aesthetic aspects of the educational platform.

- Psychological aspects of the educational platform.

- Overall assessment of the educational platform.

- Application of the educational platform.

- Personal details.

- Other: additional comments that were added about the educational web.

The authors propose the existence of two types of very similar questionnaires for teachers and students. For both teachers and students in the first four fields the results are

identical. There is of course an obviously necessary variation of data in the fields of application and personal details. In relation to the first four points we set out twenty-seven items using the Likert scale format (Varios, 1994) which consists of four categories with a numeric allocation: excellent: 4, high: 3, correct: 2 and low: 1.

In order to then process the data they used the statistics program SPSS (Statistical Package for the Social Sciences).

2. The sampling data

The teachers (from Zaragoza and Asturias) that participated in this research were a total of nineteen people generally between the ages of 20 and 65. Eight of those were women and eleven were men, all of which were spread out across a total of twelve educational centres, seven of which were public and five of which were private.

One of these teachers was aged between 20 and 35, 9 of them between the age of 36 and 50, and the other nine between the age of 51 and 65. This data is summarised in the following Table 1.

The total number of students that participated in this research exceeds 217. They were made up of a total of 114 girls and 100 boys, spread out across seven educational centres, two public and five private for the four levels of compulsory secondary education (ESO). 73 of the students were first year of secondary level education; 34 that were finishing the second year of secondary education; 41 were finishing the third year of secondary education and 69 finishing in the fourth year. This data is represented in the following Table 2.

Relación de Centros y Alumnos por nivel que participan en la experimentación

| | | Centro | | | | | | | Total |
		IES M. Cat.	Villa Cruz	La Milagrosa	Escolapias	Británico	S. D. Silos	IES V. Pilar	
1° ESO	Recuento	0	0	27	27	0	0	19	73
	% del total	,0%	,0%	12,4%	12,4%	,0%	,0%	8,8%	33,6%
2° ESO	Recuento	0	22	0	0	12	0	0	34
	% del total	,0%	10,1%	,0%	,0%	5,5%	,0%	,0%	15,7%
3° ESO	Recuento	23	0	0	18	0	0	0	41
	% del total	10,6%	,0%	,0%	6,3%	,0%	,0%	,0%	18,9%
4° ESO	Recuento	0	15	0	0	0	54	0	69
	% del total	,0%	6,9%	,0%	,0%	,0%	24,9%	,0%	31,6%
Total	Recuento	23	37	27	45	12	54	19	217
	% del total	10,6%	17,1%	12,4%	20,7%	5,5%	24,9%	8,8%	100,0%

Table 2. Details of centres and students participating in the research by academic level

3. More relevant results

77.5% of the female teachers and 72.5% of the male teachers demonstrated that the interest that they found in the Educans platform was high or excellent, and 12.5% of the women and 18.2% of the men expressed themselves saying that the tool is «correct», whilst in only 5.3% of the cases (the only male teacher of ten and nine that make up the sample) thought that the interest in the tool was low.

The obtained data shows us that an outstanding interest exists for the tool in a generalised way by the teachers, without existing however, significant differences due to factors like age, gender or type of educational centre.

As far as the opinions expressed by the students are concerned, we can see them reflected in the following Tables 3,4,5 and Graphs Figure 1 and 2. (Table 3: Interest in the service by academic level and type of centre).

In the overall summary of the interest shown in the service, the percentage exceeds 81.8% according to the students, who express a high or excellent level of interest in the service that they were offered.

Nevertheless, it is worthwhile to stress that in the case of

Tabla muestra de profesores/Centros/Edad/Sexo

Recuento

| sexo | | | | Edad | | | Total |
				de 20 a 35	de 36 a 50	de 51 a 55	
mujer	centro	IES Miguel Catalán				1	1
		Villa Cruz			2		2
		La Milagrosa				1	1
		Escuelas Pías			1	1	2
		IES Concejo de Tinero Asturias			1		1
		IES Benedicto Nieto Asturias			1		1
	Total				6	2	8
hombre	centro	IES Miguel Catalán				1	1
		Villa Cruz		1	1	1	3
		Santo Domingo de Silos				2	2
		IES Concejo de Tinero Asturias			1		1
		IES Corvera Asturias			1		1
		IES Aramo Asturias				1	1
		IES Escuela de Hostería y Turismo Asturias				1	1
		IES Virgen del Pilar				1	1
	Total			1	3	7	11

Table1. Sample from teachers / Centres / Age / Gender

Tabla de contingencia Interés por el servicio / Nivel / Tipo

| Tipo | | | | Nivel | | | | Total |
				1° ESO	2° ESO	3° ESO	4° ESO	
Público	Interés por el servicio	baja	Recuento	0		3		3
			% del total	,0%		7,3%		7,3%
		correcta	Recuento	4		10		14
			% del total	9,8%		24,4%		34,1%
		alta	Recuento	10		9		19
			% del total	24,4%		22,0%		46,3%
		excelente	Recuento	5		0		5
			% del total	12,2%		,0%		12,2%
	Total		Recuento	19		22		41
			% de Nivel	100,0%		100,0%		100%
			% del total	46,3%		53,7%		100%
Privado	Interés por el servicio	baja	Recuento	0	0	0	1	1
			% del total	,0%	,0%	,0%	,6%	,6%
		correcta	Recuento	4	3	0	14	21
			% del total	2,3%	1,7%	,0%	8,0%	12,0%
		alta	Recuento	32	23	14	43	112
			% del total	18,3%	13,1%	8,0%	24,6%	64,0%
		excelente	Recuento	18	8	4	11	41
			% del total	10,3%	4,6%	2,3%	6,3%	23,4%
	Total		Recuento	54	34	18	69	175
			% del total	30,9%	19,4%	10,3%	39,4%	100%

Table 3. Interest in the service by academic level and type of centre

students studying at public centres, 3 of a total of 41, approximately 7.3%, thought that the interest provoked by the teaching tool was low.

There is no doubt that the didactic and pedagogic interest is especially related to the individual teaching quality of the product, and in that way, the researchers believe that one of the most exceptional characteristics that this technological tool should offer within a teaching environment nowadays is that it is easy to use. Moreover, the factor that the service should be easily accessible for its users directly correlates with the opinion of the teachers about the teaching quality, and for that reason, with the didactic and pedagogic interest that could be awoken in them.

For that reason they researched if there existed a positive correlation between the ease of its use and the quality of the tool according to the opinion of the interviewed

Correlación positiva entre facilidad de uso y calidad pedagógica

		fac_uso	Cal_ pedagógica
Facilidad de uso	Correlación de Pearson	1	,657**
	Sig. (bilateral)		,002
	N	19	19
Calidad pedagógica	Correlación de Pearson	,657**	
	Sig. (bilateral)	,002	
	N	19	

** La correlación es significativa al nivel 0,01 (bilateral)
** The correlation is significant at level 0.01 (bilateral)

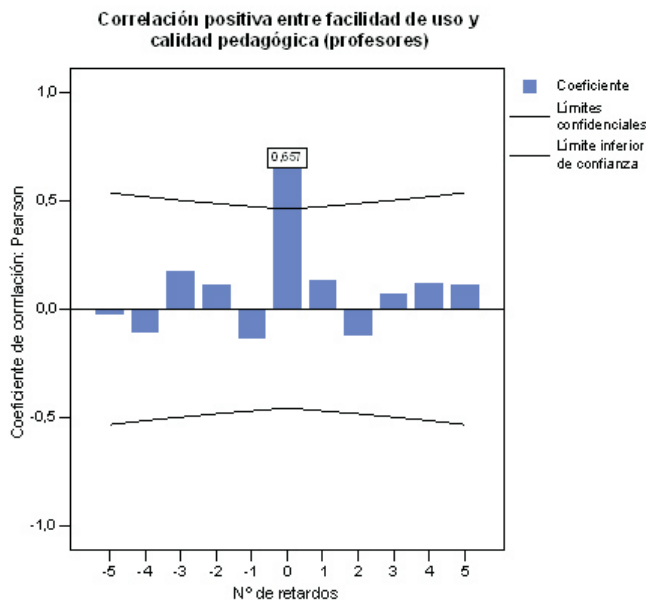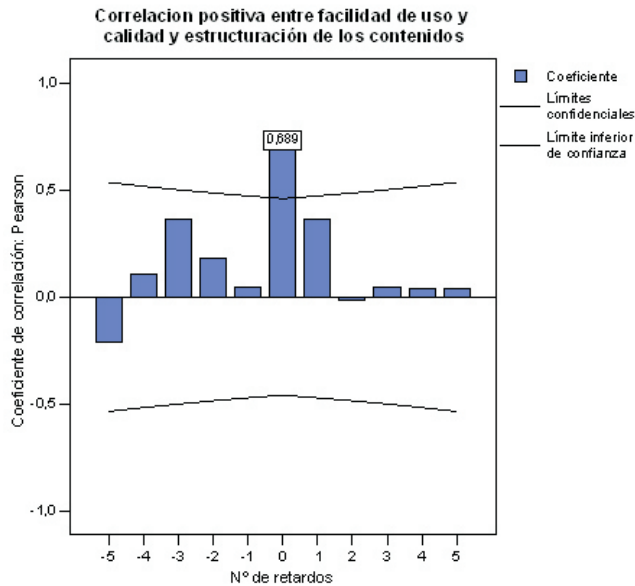Table 4. Positive correlation between ease of use and pedagogic quality

Figure 1. Positive correlation between ease of use and pedagogic quality

teaching staff (Table 4). The results were tabulated in Table 4 and as a Graph in Figure 1.

The ease of use of this platform was evident in both the opinions of the students as well as the teachers, so they wanted to check to what extent this ease of use directly correlated with the pedagogic quality of the tool (Table 5). The results obtained are as follows:

The corresponding answers to this part of the research showed that whilst 79% of the teachers thought that the platform had an evident interest for its activity, now 94.8% of their answers are evidence that this platform has adequate pedagogic quality for its teaching purpose. This result stands out, that 47.4% stated that the pedagogic quality of the product was high or excellent. Not being of particular importance the distribution of this opinion, comparatively speaking, it is between the categorization of the educational centres.

Continuing the same tendency they understand that a direct and positive correlation should exist between the quality and structuring of the content and the ease of use. For the teaching task it is absolutely necessary that everything that is taught is potentially significant for the learner and that the vehicle by which this communication is driven does not obstruct or hold back from its purpose. For the opposite reason, the content that is intended to be taught should be reduced, and therefore, what would be most important would not perhaps be delivered adequately. In this case, the content would also be disrupted in delivering a clear message.

For that reason they wanted to check that, as this correlation should exist, that further on if that were the case, they would be able to confirm that the platform, which is the object of this study, was suitable for the teaching interests.

The results that obtained from the teachers answers enabled to demonstrate that there was in fact a clear

Calidad pedagógica según profesores / Tipo de Centro

		Tipo		Total
		Público	Privado	
cal-pedagógica	baja	5,3%	,0%	5,3%
	correcta	21,1%	26,3%	47,4%
	alta	,0%	26,3%	26,3%
	excelente	21,1%	,0%	21,1%

Table 5. Pedagogic quality according to teachers / type of centre

Correlación positiva entre la facilidad de uso y la calidad y estructuración de los contenidos

		fac_uso	cal_estruc_cont
Facilidad de uso	Correlación de Pearson	1	,689**
	Sig. (bilateral)		,001
	N	19	19
Calidad y estructuración de los contenidos	Correlación de Pearson	,689**	1
	Sig. (bilateral)	,001	
	N	19	19

** La correlación es significativa al nivel 0,01 (bilateral)
** The correlation is significative at level 0.01 (bilateral)

Table 6. Positive correlation between ease of use and quality of current structuring

Figure 2. Positive correlation between ease of use and quality of contents structuring

Calidad de los contenidos / total de alumnos / nivel

		Nivel				Total
		1º ESO	2º ESO	3º ESO	4º ESO	
Baja	Recuento	1	1	3	4	9
	% del total	,5%	,5%	1,4%	1,8%	4,1%
Correcta	Recuento	8	4	6	21	39
	% del total	3,7%	1,8%	2,8%	9,7%	18,0%
Alta	Recuento	35	17	26	33	111
	% del total	16,1%	7,8%	12,0%	15,2%	51,2%
Excelente	Recuento	29	12	6	11	58
	% del total	13,4%	5,5%	2,8%	5,1%	26,7%

Table 7. Content quality / total of students / level
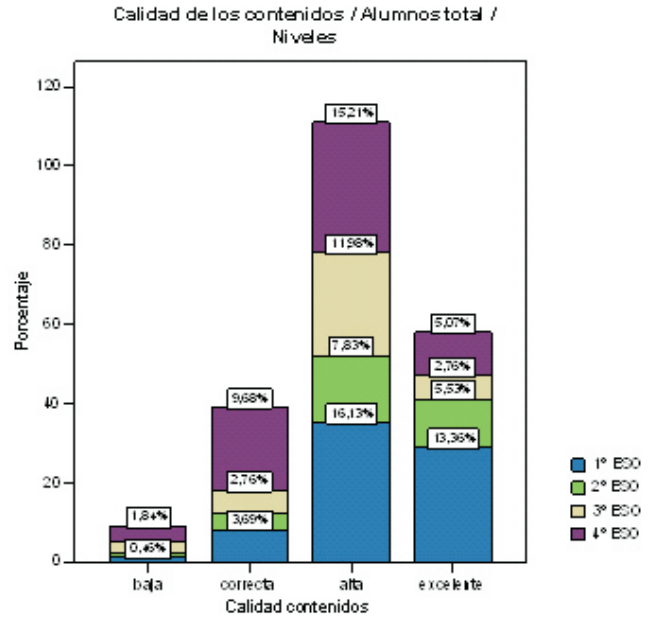
Figure 3. Content quality / total of students / level

correlation between these elements. These results are tabulated in Table 6 and as a graph in Figure 2.

On the other hand it is important to recognise the opinion that the teachers participating in the research had about the didactic and pedagogic quality of the platform at the heart of the study, Educans. The researchers wanted to stress the general similarity of the opinions that the students and teachers had of the content quality. The platform could awaken positive interest because of its structure, image, accessibility, etc. and however, the contents do not satisfy all of the participants' expectations or needs.

The opinions that the students demonstrated are expressed in the following Tables and Graphs.

Firstly, the general opinion that all the students expressed are given in Table 7 and Figure 3.

On the other hand, if they reduce this information a little, analysing it by levels (Table 8), the results are as follows:

A total of nine students, (which would make up about 4.14% of the total) thought that the content quality that the platform Educans has was low.

Looking at this data in a global way it shows us how seven of those nine students were studying in the third and fourth years of compulsory secondary education and there was no significant difference related to being at a public or private educational centre (three of them did it at a public school and the other four at a private one).

In any case, it is taking into account the difference that exists between the interviewed students from public and

Calidad de los contenidos / total de alumnos / nivel

		Nivel				Total
		1º ESO	2º ESO	3º ESO	4º ESO	
Baja	Recuento	1	1	3	4	9
	% del total	,5%	,5%	1,4%	1,8%	4,1%
Correcta	Recuento	8	4	6	21	39
	% del total	3,7%	1,8%	2,8%	9,7%	18,0%
Alta	Recuento	35	17	26	33	111
	% del total	16,1%	7,8%	12,0%	15,2%	51,2%
Excelente	Recuento	29	12	6	11	58
	% del total	13,4%	5,5%	2,8%	5,1%	26,7%

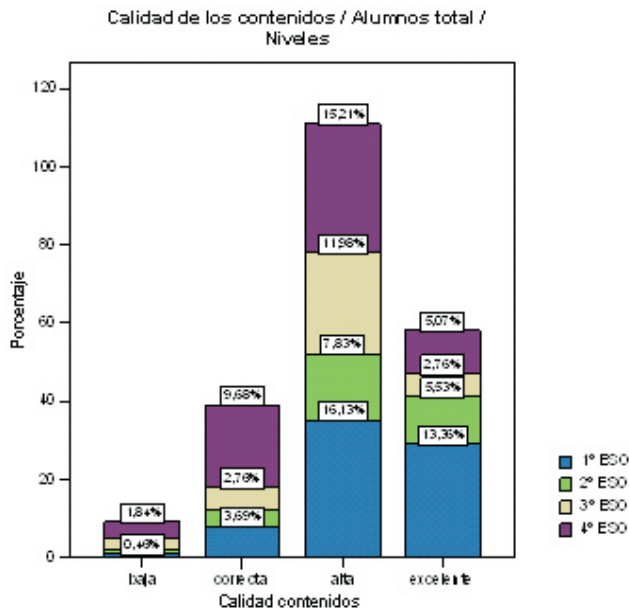Table 8. Content quality / total of students / level

Figure 4. Content quality / total of students / level

private educational centres. 19.4% were students from public schools, and 80.6% were from private centres, and so it could be said that the dissatisfaction as far as the content quality is concerned, was greater amongst students finishing their academic studies in a public school than in private schools. Additionally, it was greater in the higher level years of academic studies.

Anyway, they understand that this percentage that indicated that the platform did not comply with its purpose, or took into account the student's learning by making the task easier for the teacher as well as for the student, was not so relevant as to disregard the platform as ineffective.

These considerations are reflected in the following graphs and tables:

From Table 9, practically 96% of the students indicated in the questionnaires that the content quality of the platform Educans was correct, high or excellent, and that in the

Opinión sobre la calidad de los contenidos / Alumnos / Tipo de Centro

| | | Tipo | | total |
		Público	Privado	
Baja	Recuento	3	6	9
	% del total	1,4%	2,8%	4,1%
Correcta	Recuento	9	30	39
	% del total	4,1%	13,8%	18,0%
Alta	Recuento	20	91	111
	% del total	9,2%	41,9%	51,2%
Excelente	Recuento	10	48	58
	% del total	4,6%	22,1%	26,7%

Table 9. Opinion about content quality / students / type of centre

same way, it stands out within this elevated percentage, 77.8% of those polled confirm that the content quality was high or excellent.

Researchers have already remarked that the platform, in the opinion of the teachers polled, was satisfactory in a high percentage of the cases, but almost all of the total percentage were in agreement, 94.8% of the teachers expressed that the didactic and pedagogic interest was correct, high or excellent, and 95.9% of the students responded satisfactorily when questioned about the content quality of this platform. It is true though that the teachers responded in a more prudent way, given that 47.4% of them thought that the didactic and pedagogic interest was correct, whilst for the students, almost 78% thought that the content quality was high or excellent.

Therefore, the results say that what the platform offers awakens more interest in the students than in the teaching staff.

They also wanted to know if the content that houses the platform would offer sufficient up-to-date material for pupils and teachers.

As far as this last question is concerned, the teaching staff responded as shown in the following tables and graphs (Table 10 and Figure 5).

The results shows, the total of the questioned teaching staff

Actualidad de los contenidos / total profesores

	Frecuencia	Porcentaje
Correcta	5	26,3
Alta	10	52,6
Excelente	4	21,1
Total	19	100,0

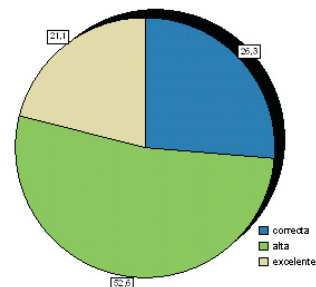Table 10. Content quality / all teachers

Figure 5. Content quality / all teachers

declared that the material was sufficiently up-to-date, (73.4% said that it was high or excellent). Reaching this point in the research we wanted to check if there existed any differences of opinion that would be interesting to look at, in terms of how up-to-date the material was for teachers, once split into categories according to type of educational centre or gender.

These results are tabulated in Tables 11 & 12 and as graphs in Figures 6 & 7.

In this section they observe, how 22.2% of the teachers at

Actualidad de los contenidos / Profesores total / Materias

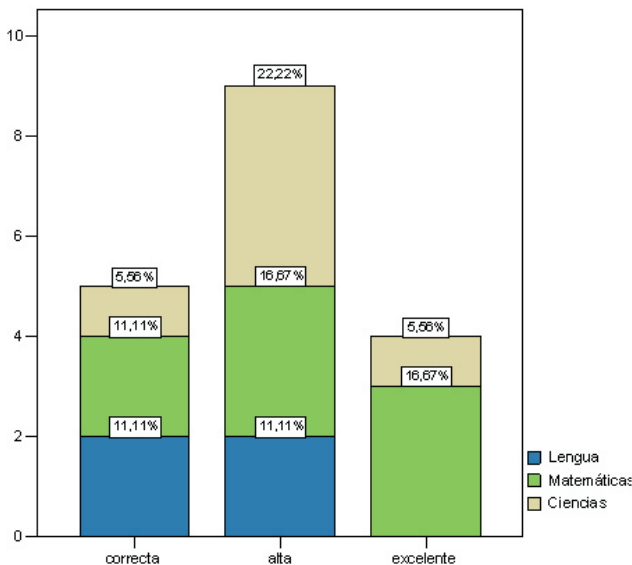|			materia			Total
			Lengua	Matemáticas	Ciencias	
Actualidad	Correcta	Recuento	2	2	1	5
		% del total	10,5%	10,5%	5,3%	26,3%
	Alta	Recuento	2	3	4	10
		% del total	10,5%	15,8%	21,1%	52,6%
	Excelente	Recuento	0	3	1	4
		% del total	,0%	15,8%	5,3%	21,1%
Total		Recuento	4	8	6	19
		% del total	21,1%	42,1%	31,6%	100,0%

Table 11. Modernity of content / total teachers / subject

Figure 6. Modernity of content / total teachers / subject

Actualidad de los contenidos / profesores / tipo de centro

		Tipo		Total
		Público	Privado	
Correcta	Recuento	2	3	5
	% del total	10,5%	15,8%	26,3%
Alta	Recuento	3	7	10
	% del total	15,8%	36,8%	52,6%
Excelente	Recuento	4	0	4
	% del total	21,1%	,0%	21,1%

Table 12. Modernity of content / teachers / type of centre
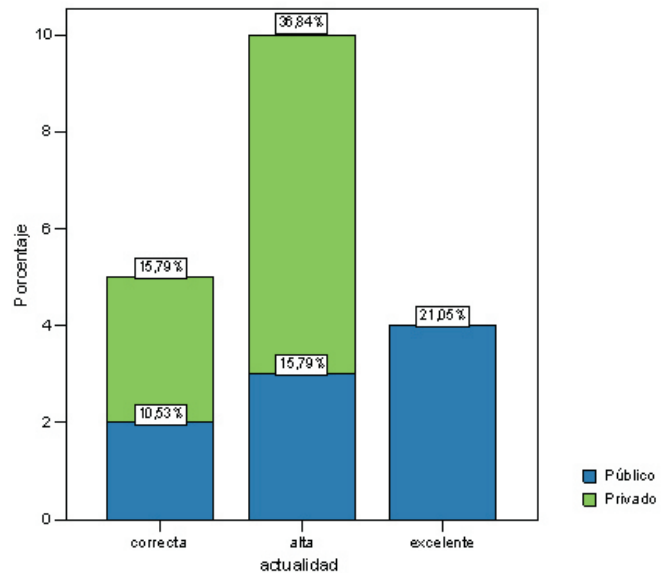

Figure 7. Modernity of content / total teachers / subject

private centres, versus 30% of teachers that work at public schools thought that the modernity of material was correct, the percentage difference is a lot more evident (36.7% difference) between the two, given that 33.3% of the teachers that are in the public schools rated the modernity of material as high, whilst the same ranking was 70% for private centres.

They say that, therefore, all of the teachers that expressed positive views towards the modernity and suitability of the material, if it is true, had opinions that came from a more widespread source in the public schools, versus the concentration of those working at private centres. This demonstrates a more notable tendency towards the perception of the modernity of material being more commonly high, but in the case of those in public centres, more commonly excellent.

The researchers believe that the reason for this fact is that the content of this platform has been carried out based upon the designated minimum requirements, with the intention that it could serve as a form of revision or an alternative to textbooks on one hand, and on the other, between the educational centres that have participated in the research, as a requirement for students that are finishing their studies in private centres as a differentiating argument to present to their parents.

No other significant difference appeared in this sense when we applied the categories of gender to this variable.

When they applied the age category to the results to observe if it would produce any changes in tendencies, there were no major changes that stood out significantly, as in Table 13 and in Figure 8.

They were also interested to find out the opinion of this aspect, sieving through the variable matters, with an object to check if there was any information that could be relevant, in any way (Table 14 and Figure 9).

As from the previous graphs, teachers that carry out the educational activity in the area of Science (Mathematics and Science) are those that express a higher satisfaction as regards the modernity of material as appropriate. The same occurred when we analysed their opinions as concerns the pedagogic quality of the tool in general.

A question on the other hand that does not surprise us, each time that a positive correlation exists between both

Actualidad de los contenidos / profesores / rangos de edad

		edad			Total
		De 20 a 35	De 36 a 50	De 51 a 65	
Correcta	Recuento	0	2	3	5
	% del total	,0%	10,5%	15,8%	26,3%
Alta	Recuento	1	4	5	10
	% del total	5,3%	21,1%	26,3%	52,6%
Excelente	Recuento	0	3	1	4
	% del total	,0%	15,8%	5,3%	21,1%

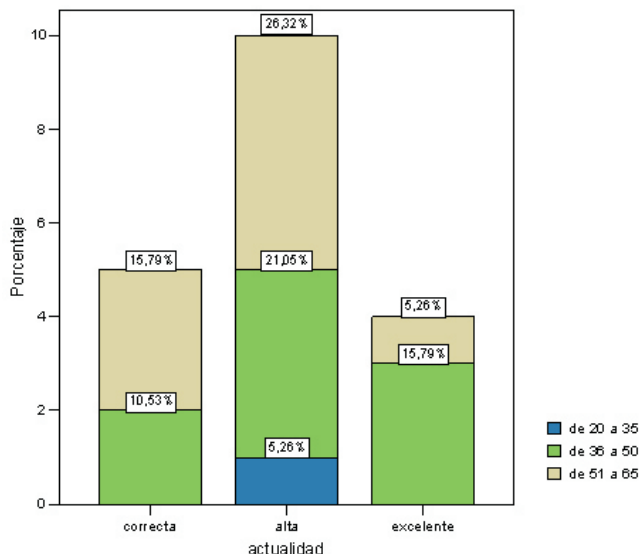Table 13. Modernity of content / teachers /age ranges

Figure 8. Modernity of content / teachers /age ranges

Actualidad de los contenidos / Profesores / Materias

		materia				Total
		Lengua	Matemáticas	Ciencias	Otras	
Correcta	Frecuencia	2	2	1	0	5
	% del total	10,5%	10,5%	5,3%	,0%	26,3%
Alta	Frecuencia	2	3	4	1	10
	% del total	10,5%	15,8%	21,1%	5,3%	52,6%
Excelente	Frecuencia	0	3	1	0	4
	% del total	,0%	15,8%	5,3%	,0%	21,1%

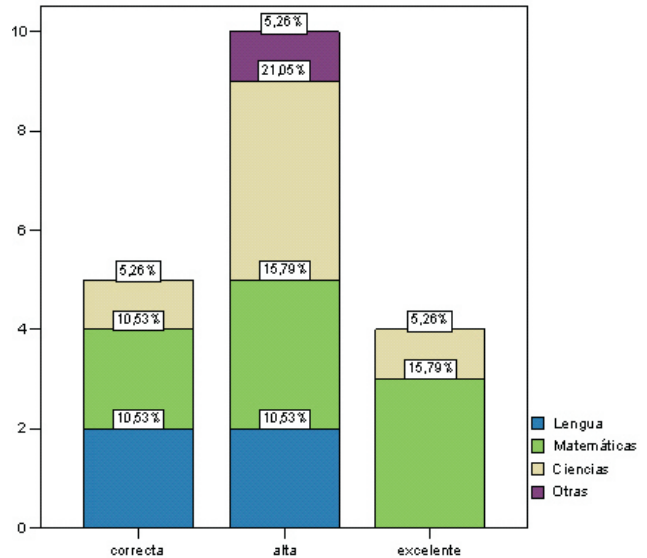Table 14. Modernity of content / teachers / subjet

Figure 9. Modernity of content / teachers / subjet

Correlación positiva entre calidad pedagógica y actualidad de los contenidos

		Calidad pedagógica	actualidad
Calidad pedagógica	Correlación de Pearson	1	,672**
	Sig. (bilateral)		,002
	N	19	19
Actualidad	Correlación de Pearson	,672**	1
	Sig. (bilateral)	,002	
	N	19	19

** La correlación es significativa al nivel 0,01 (bilateral)

** The correlation is significant at level 0.01 bilateral

Table 15. Positive correlation between pedagogic quality and modernity of content

as in Table 15 and Figure 10.

If this same question is considered the consideration of the students and their answers are shown in the ranking that are represented in the graphs (Figures 11 & 12) and Tables (Tables 16 & 17).

In the previous Table 14 it is observed what perception the questioned students had as regards the content quality of the platform and the comparison of it in levels.

On this occasion, besides reflecting the counted frequencies, the researchers offer a percentage data that includes the proportion that is broken into each level with
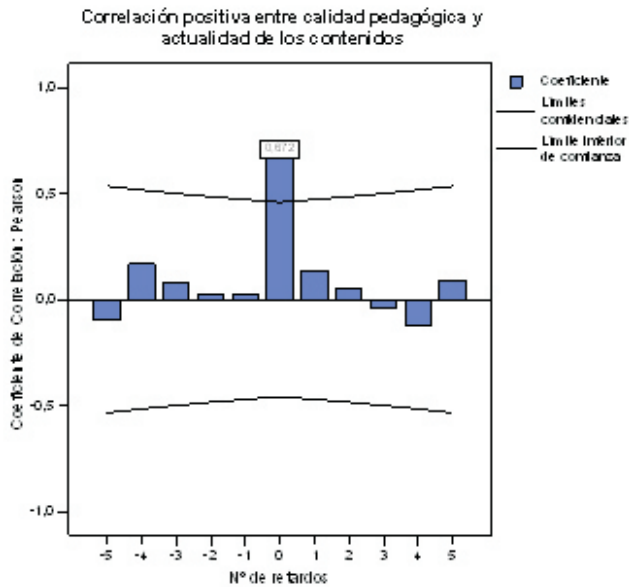
Figure 10. Positive correlation between pedagogic quality and modernity of content

Actualidad contenidos / Alumnos / Total

		Frecuencia	Porcentaje	Porcentaje válido
	Baja	5	2,3	2,3
	Correcta	35	16,1	16,4
	Alta	100	46,1	46,7
	Excelente	74	34,1	34,6
	Total	214	98,6	100,0
Perdidos	Sistema	3	1,4	
Total		217	100,0	

Table 16. Modernity of content / students / total)
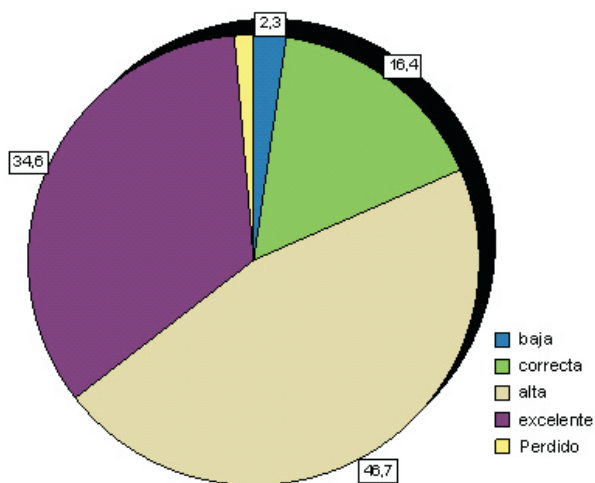
Actualidad contenidos / Alumnos / Total

Figure 11. Modernity of content / students / level

the frequency indicated and, in any case it perceives how nine students (4.1% of the total) evaluate the content

Calidad de los contenidos / alumnos / nivel

		Nivel				Total
		1° ESO	2° ESO	3° ESO	4° ESO	
Baja	Recuento	1	1	3	4	9
	% de nivel	1,4%	2,9%	7,3%	5,8%	4,1%
Correcta	Recuento	8	4	6	21	39
	% de nivel	11,0%	11,8%	14,6%	30,4%	18,0%
Alta	Recuento	35	17	26	33	111
	% de nivel	47,9%	50,0%	63,4%	47,8%	51,2%
Excelente	Recuento	29	12	6	11	58
	% de nivel	39,7%	35,3%	14,6%	15,9%	26,7%

Table 17. Modernity of content / students / level
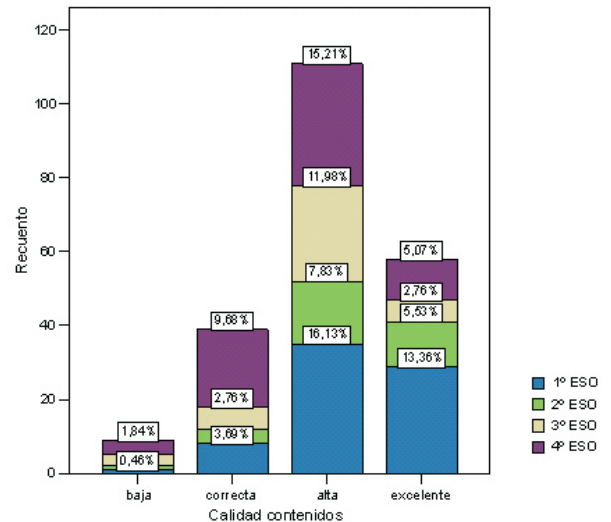
Calidad de los contenidos / alumnos / nivel

Figure 12. Modernity of content / students / level

quality badly, fundamentally, 3 and 4 students from third and fourth year of compulsory secondary education, which implies that 7.3% and the 5.8% of the respective levels understand that the modernity of the content is low.

It is a result that, without doubt, needs to be considered but that does not assume a sufficient counterweight for the favourable majority opinion on behalf of the rest of the questioned participants.

With this information the study can conclude, therefore, that for all of those participating in the research, independent of their function as a teacher or student, the modernity of texts that the platform presents is correct or satisfactory, which only allows us to conclude that the material is suitably up-to-date in order to meet with the teaching objectives in general.

One of the efforts that has made this question possible, in our judgement, focuses on the activities offered by the platform.

At the time of carrying out the analysis a total of thirteen

types of activities and a total of 1,417 pages of theory were used, distributed in a total of 99 units that were accompanied by a total of 9,204 different activities.

On the other hand, it is important for a tool that intends to be a support for the teaching action that it is able to generate interest and motivation in all of its users, teachers as well as students. In fact, it is one of the objectives that this investigation set out at the beginning.

Therefore, we manage to get information from not only teachers but also from students to see to what extent this element of generating interest, ability and motivation existed from the point of view of the user or not.

We presumed that, in the teacher's opinion, the capacity to create interest and motivation in the tool had to be positive, because we understood that a direct correlation existed between this item and the item quality and structuring of the content that we had already seen and which had a very successful rating according to its users.

In order to reinforce this idea we bring together here, the resulting index of correlation by Pearson Table 18 and Figure 13.

With that we can contrast that, effectively, a positive correlation exists, as we confirm and can graphically show with the following:

Having analysed the data in this way, the first thing that we should conclude, overall, is that it achieves the objectives that we had considered for teachers and to which we referred to above, given that on a scale from one to four, the average result of the answers is 2.53.

52.7% of the teachers indicated that the motivation and interest that this platform generates is high or excellent; 42.1% thought that it was correct and the remaining 5.3% thought that it was low. The results collected are as follows

Figure 13. Correlation: quality of structure and ability to motivate

Profesores / Interés - motivación

	Frecuencia	Porcentaje
Baja	1	5,3
Correcta	8	42,1
Alta	9	47,4
Excelente	1	5,3
Total	19	100,0

Table 19. Teachers / motivation

Figure 14. Teachers / motivation

Table 19 and Figure 14.

In this respect, the teachers thought, according to the questionnaires, that this tool was more motivating and generated more interest when they referred to the subject areas of Science and Mathematics.

In the case of the teachers that carried out their activity in a private educational centre, 100% thought that the

Correlación: calidad de la estructura y capacidad de motivación

		Cal_estruc_mat	Motivación
Cal_estruc_mat	Correlación de Pearson	1	,726**
	Sig. (bilateral)		,000
	N	19	19
Motivación	Correlación de Pearson	,726**	1
	Sig. (bilateral)	,000	
	N	19	19

** La correlación es significativa al nivel 0,01 (bilateral)

** The correlation is significant at level 0.01 (bilateral)

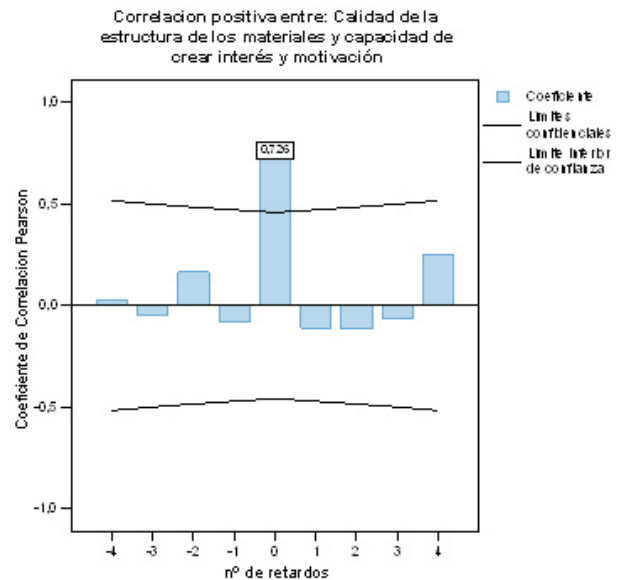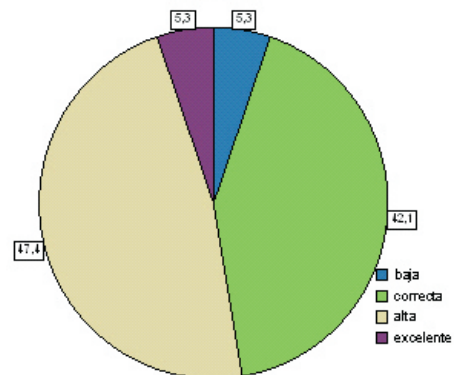Table 18. Correlation: Quality of structure and ability to motivate

capacity to create interest and motivation with this tool was correct or high; whilst the percentage reduces to 77.7% in the case of the teachers that carry it out in a public centre (Table 20 and Figure 15).

If they analyse the opinion that the teachers offer us, from

Capacidad general motivación / Profesores / Materias

			Baja	Correcta	Alta	excelente
Materia	Lengua	Frecuencia	0	2	2	0
		% del total	,0%	10,5%	10,5%	,0%
	Matemáticas	Frecuencia	1	2	4	1
		% del total	5,3%	10,5%	21,1%	5,3%
	Ciencias	Frecuencia	0	3	3	0
		% del total	,0%	15,8%	15,8%	,0%
	Otras	Frecuencia	0	1	0	0
		% del total	,0%	5,3%	,0%	,0%
Total		Frecuencia	1	8	9	1
		% del total	5,3%	42,1%	47,4%	5,3%

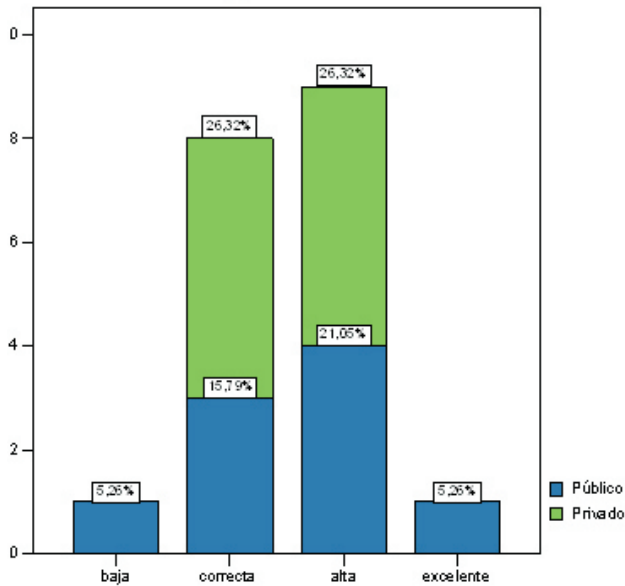Table 20. Ability to create interest and motivation / teachers / type of centre

Figure 15. Ability to create interest and motivation / teachers / type of centre

Capacidad de crear interés y motivación / Profesores / Tipo de Centro

		Tipo		Total
		Público	Privado	
Baja	Recuento	1	0	1
	% de tipo	11,1%	,0%	5,3%
Correcta	Recuento	3	5	8
	% de tipo	33,3%	50,0%	42,1%
Alta	Recuento	4	5	9
	% de tipo	44,4%	50,0%	47,4%
Excelente	Recuento	1	0	1
	% de tipo	11,1%	,0%	5,3%

Table 21. General ability to motivate / teachers / subject

the point of view of the subjects that they teach, the data they obtained is as follows Table 21.

From Table 19 they confirm that how the teachers carry out their function in the subjects of Mathematics and Science are those more inclined to think that this tool is very capable to motivate and generate interest, whilst teachers of Language are those that express the most scepticism.

On the other hand, the researchers had participated in an idea that they wanted to contrast with the positive correlation that should exist between the interest that the service produces in the teachers and the ability to motivate and create interest for the users, given that the teachers demonstrated a positive ranking of the interest in the service that this platform offered them, finally, they can ascertain what is shown in the following data (Table 22 and Figure 16).

Once they have studied the teacher's opinions as regards the ability to create interest and motivation with this tool, they present in the section that follows the opinions that

Correlación positiva entre interés por el servicio y capacidad de crear interés y motivación

		Interes_servi	Motivación
Interés por el servicio	Correlación de Pearson	1	,654
	Sig. (bilateral)		,002
	N	19	19
Capacidad de crear interés y motivación	Correlación de Pearson	,654**	1
	Sig. (bilateral)	,002	
	N	19	19

** La correlación es significativa al nivel 0,01 (bilateral)

** The correlation is significant at level 0.01 (bilateral)

Table 22. Positive correlation between interest in the service and ability of the service to create interest and motivation
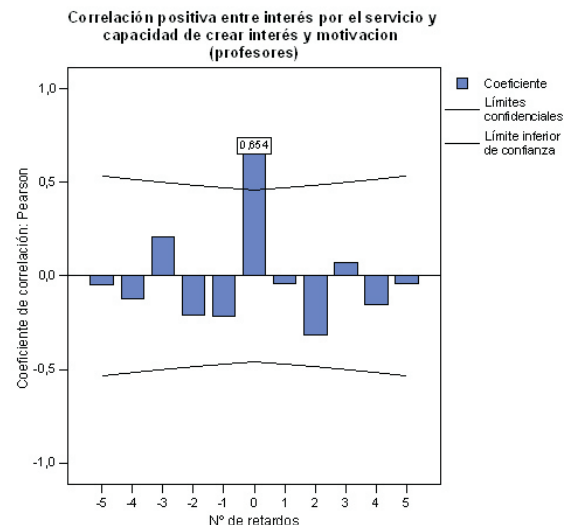

Figure 16. Positive correlation between interest in the service and ability of the service to create interest and motivation

were expressed by the pupils about the ability that the platform 'Educans' has, in their judgement.

The students indicated an average of 2.88 in an interval that went from 1 to 4 which, in principle, shows a rating equivalent to excellent. The results are tabulated in Table 23 and the Figure 17.

Almost 74% of the students expressed that this tool had a high or an excellent ability to motivate and create interest in its users.

As should be expected, the students of superior level courses are where the worst rating is concentrated as regards this aspect of the tool that we are analysing. The obtained results are shown in the following Table and graph Table 24 and Figure 18.

In spite of what the researchers have so far mentioned, when they proved that students of higher level education were those that gave the lowest ratings for this aspect of the platform, it should be pointed out that for the same group there is a high concentration of positive opinions. Despite that, the students from the lower level education are those that gave the highest ratings for this section of the

Tabla de contingencia Motivación / Nivel

| | | Nivel | | | | Total |
		1° ESO	2° ESO	3° ESO	4° ESO	
Baja	Recuento	0	1	6	13	20
	% del total	,0%	,5%	2,8%	6,0%	9,2%
Correcta	Recuento	4	5	15	13	37
	% del total	1,8%	2,3%	6,9%	6,0%	17,1%
Alta	Recuento	39	21	19	29	108
	% del total	18,0%	9,7%	8,8%	13,4%	49,8%
Excelente	Recuento	30	7	1	14	52
	% del total	13,8%	3,2%	,5%	6,5%	24,0%

Table 24.Table of contingency: motivation / level

Figure 18. Ability to motivate / students / level

Alumnos / capacidad para motivar

	Frecuencia	Porcentaje
Baja	20	9,2
Correcta	37	17,1
Alta	108	49,8
Excelente	52	24,0
Total	217	100,0

Table 23. Students / ability to motivate

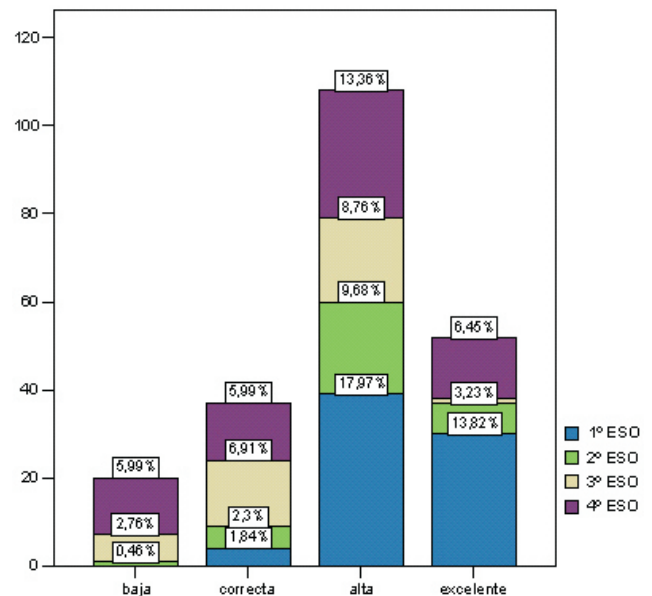Figure 17. Students / ability to motivate

questionnaire, which allows us to conclude that the tool is effectively capable to motivate and generate interest, although this interest and motivation is higher in the lower level courses.

On the other hand, the results indicate that there is a certain tendency to rise when they look at the data offered by the female students, which represent an average of 2.97 in an interval of 1 to 4 compared with the average for the male students of 2.79 with the same interval. Here are the corresponding graphs and Tables (Table 25 and Figure 19).

4. Overall rating of the participants

A first numeric estimate of the results obtained from the participants gives us an idea that the overall rating given is better on behalf of the students than the teachers.

The average rating in the answers from the teachers is 2.74 (out of 4), whilst that of the students is 3.01 (almost out of 4).

Tabla de contingencia Motivación / Sexo

			Sexo		total
			Mujer	Hombre	
Baja	Frecuencia		6	14	20
	% del total		2,8%	6,5%	9,2%
Correcta	Frecuencia		20	17	37
	% del total		9,2%	7,8%	17,1%
Alta	Frecuencia		63	45	108
	% del total		29,0%	20,7%	49,8%
Excelente	Frecuencia		28	24	52
	% del total		12,9%	11,1%	24,0%

Table 25. Table of contingency / motivation / gender

Valoración global del servicio / Profesores / Tipo de Centro

			Tipo		Total
			Público	Privado	
servicio	Baja	Recuento	1	0	1
		% de tipo	11,1%	,0%	5,3%
	Correcta	Recuento	2	5	7
		% de tipo	22,2%	50,0%	36,8%
	Alta	Recuento	3	4	7
		% de tipo	33,3%	40,0%	36,8%
	Excelente	Recuento	3	1	4
		% de tipo	33,3%	10,0%	21,1%

Table 26. Overall rating of the service / teachers / type of centre

Capacidad de motivación / Alumnos / Sexo
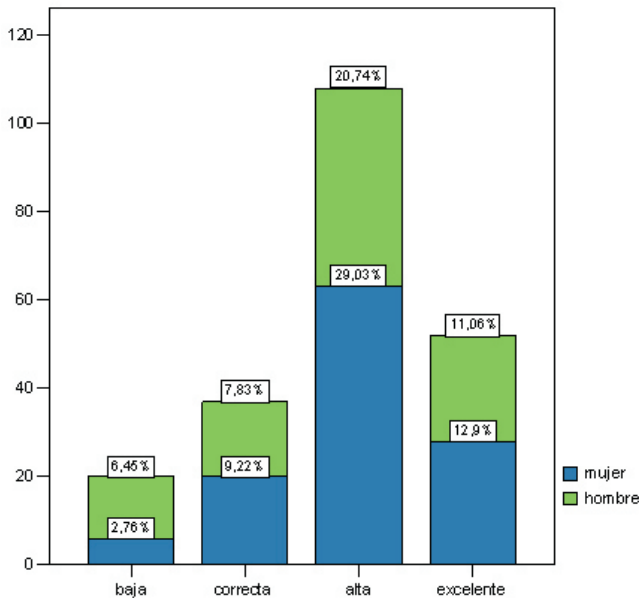
Figure 19. Ability to motivate / students / gender

Valoracion global del servicio / Profesores / Tipo de Centro
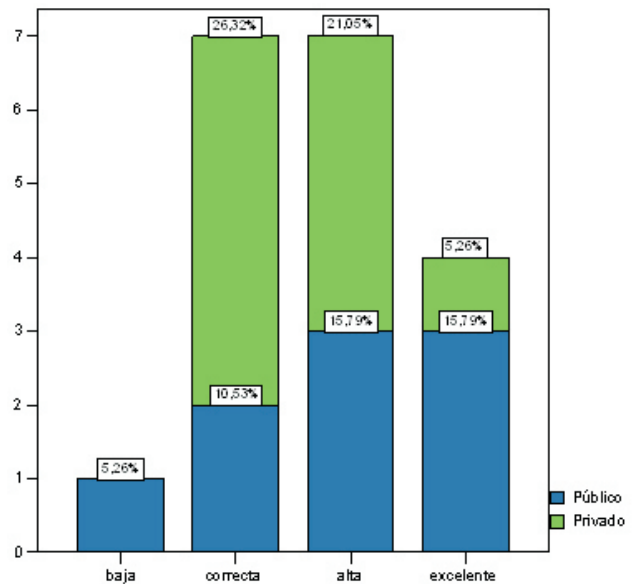
Figure 20. Overall rating of the service / teachers / type of centre

In any case, both results show that the overall average evaluation of the participants is reasonably satisfactory.

It is necessary to say that around 98% of the students and around 95% of the interviewed teachers passed the 'Educans' platform.

On the other hand, whilst 90% of the teachers that carried out the teaching activity in a private centre thought that the overall evaluation that this tool has was correct or high, and only 55.5% of the teachers in public schools were in agreement with this statement (Table 26 and Figure 20).

Filtering the data through the variable of educational year or level in which the teachers worked presented different results, as follows (Table 27 and Figure 21).

On first impressions there are few differences, however, from a relative point of view, considering as a percentage

Valoración global del servicio / Profesores / Nivel

		Curso				Total
		1º	2º	3º	4º	
Baja	Recuento	0	1	0	0	1
	% de curso	,0%	20,0%	,0%	,0%	5,3%
Correcta	Recuento	0	3	2	2	7
	% de curso	,0%	60,0%	28,6%	50,0%	36,8%
Alta	Recuento	3	1	3	0	7
	% de curso	100%	20,0%	42,9%	,0%	36,8%
Excelente	Recuento	0	0	2	2	4
	% de curso	,0%	,0%	28,6%	50,0%	21,1%

Table 27. Overall ratting of the service / teachers / level

the number of teachers working in different years of compulsory secondary education; it seems that the teachers of the third year in compulsory secondary education rate the service that the tool offers a little better than those in the fourth year.

Between the students, however, the same phenomenon occurred, but in the opposite way. 87.8% of the students from public schools, compared with 60.6% of those

Valoración global del servicio / Profesores / Nivel

Figure 21. Overall ratting of the service / teachers / level

Valoración del Servicio / Alumnos / Tipo de Centro

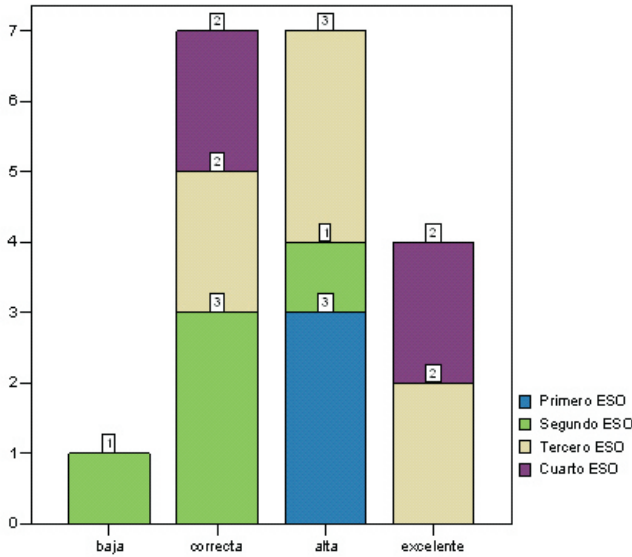|			Tipo		Total
			Público	Privado	
Servicio	Baja	Recuento	1	5	6
		% de tipo	2,4%	2,9%	2,8%
	Correcta	Recuento	11	29	40
		% de tipo	26,8%	16,6%	18,5%
	Alta	Recuento	25	77	102
		% de tipo	61,0%	44,0%	47,2%
	Excelente	Recuento	4	64	68
		% de tipo	9,8%	36,6%	31.5%

Table 28. Ratting of service / students / type of centre

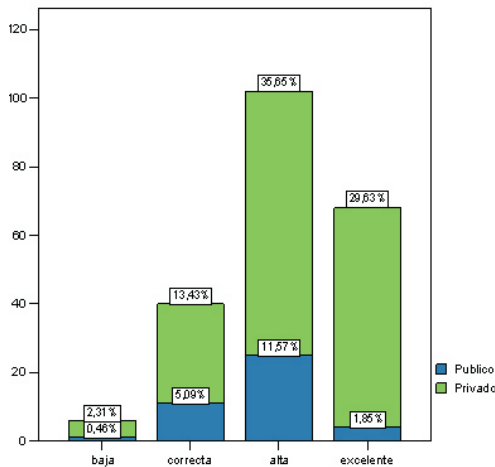Valoración global del servicio / Alumnos / Tipo de Centro

Figure 22. Overall rating of the service / students / type of centre

studying in private centres, thought that the overall evaluation of the platform was correct or high (Table 28 and Figure 22).

However, despite what they could think having analysed the results in the anterior pages, the teachers that did their activity in the area of Language were those that gave an overall better evaluation of the tool as correct or high (Table 29).

On the other hand, also worth our attention, is that despite that higher level years have come across as the most critical in some of the ratings that have remained lower throughout the investigation and for those that have scored discretely or lowly, now, having been questioned about the overall evaluation of the service, in their judgement, the platform offers its users a rating reflected higher than what we would expect (Table 30).

Nevertheless, from the above table, the inferior years were those that scored positively as a whole about the service that the platform offers. This is the opposite of what they saw in the case of the teachers.

From the technical point of view the overall evaluation that the teachers gave was as follows Table 31 and Figure 23.

The average of the accredited results from the teachers, as far as the technical quality is concerned, is 2.89 out of 4, which is clear that in the teacher's judgement and from a technical point of view, the Educans platform deserves considerable attention.

In agreement with the reflected results, it seems that the

Valoración global del servicio / Profesores / Materia

		Materia				Total
		Lengua	Matemáticas	Ciencias	Otras	
Baja	Recuento	0	1	0	0	1
	% de materia	,0%	12,5%	,0%	,0%	5,3%
Correcta	Recuento	1	3	2	1	7
	% de materia	25,0%	37,5%	33,3%	100,0%	36,8%
Alta	Recuento	3	1	3	0	7
	% de materia	75,0%	12,5%	50,0%	,0%	36,8%
Excelente	Recuento	0	3	1	0	4
	% de materia	,0%	37,5%	16,7%	,0%	21,1%

Table 29. Overall rating of service / teachers / subjet

Valoración global del servicio que presta la herramienta / Alumnos / Nivel

		Nivel				Total
		1° ESO	2° ESO	3° ESO	4° ESO	
Baja	Recuento	0	0	1	5	6
	% de Nivel	,0%	,0%	2,5%	7,2%	2,8%
Correcta	Recuento	8	2	9	21	40
	% de Nivel	11,0%	5,9%	22,5%	30,4%	18,5%
Alta	Recuento	33	16	28	25	102
	% de Nivel	45,2%	47,1%	70,0%	36,2%	47,2%
Excelente	Recuento	32	16	2	18	68
	% de Nivel	43,8%	47,1%	5,0%	26,1%	31,5%

Table 30. Overall ratting of service that the tool offers / students / level

Calidad Técnica / Profesores

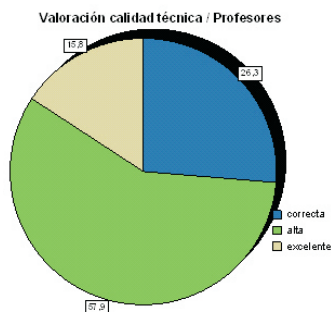|	Frecuencia	Porcentaje
Correcta	37	17,1
Alta	108	49,8
Excelente	52	24,0
Total	217	100,0

Table 31. Technical quality / teachers

Figure 23. Technical quality / teachers

teachers that carry out their work in public schools rate the technical quality of the platform, in general, with an average score of 3.22, compared to an average of 2.89 for the teachers that carry out their teaching activities in private centres (Table 32).

IThe previous table shows how, referring principally to the percentages that females consider the technical quality of the tool superior compared to the males. 85.5% of the women think that the technical quality is high or excellent, whilst only 63.6% of the men were in agreement.

At the beginning of this investigation the researchers thought that one of the questions which someone who wants to make a platform with these characteristics would have to consider is that its key user is the student, but that of course, it would need to convince both teacher and student in order to achieve minimum requirements of usefulness and success.

From the results, that they have gathered in the questionnaires can confirm that overall, this platform has some factors that are able to satisfy the student and teacher and, because of this, can be used for the objectives that were proposed originally.

Calidad técnica / Profesores / Sexo

			sexo		Total
			mujer	hombre	
cal_tecnica	correcta	% de sexo	12,5%	36,4%	26,3%
	alta	% de sexo	62,5%	54,5%	57,9%
	excelente	% de sexo	25,0%	9,1%	15,8%

Table 32. Technical quality / teachers / gender

The investigation to which they are referring also raises in other sections the academic results that they obtain in different areas, the subjects of this educational process contemplates that of the platform (experimental group) compared to the results obtained by those students that do not comply with this intervention (group control). In any case, the grading was better in the experimental group.

They replace the interested participants to contrast this information in the corresponding documents deposited in the University of Huelva.

5. Restrictions of this platform

'Educans' is an educational platform that serves as a tool to revise technical content in the following subject areas: Mathematics, Natural Sciences and Language Studies in the four levels of compulsory secondary education.

It is possible to carry out more than 9,000 autocorrecting exercises and awaken interest in both teachers and students. Both its use as well as a critical evaluation has demonstrated that the internal structure and administrative tools comply with its expectations.

Within the limitations that the researched platform has, some questions stand out like that the same thing has been carried out in its totality using flash technology, which does have some important restrictions (Riera, 2001) related to, for example, the modification or adjustment of the subtitles that accompany the phrases of the technical theory that is presented.

This question, in turn, implies limitations related to the adaptability of the texts with different formats, for example in varying colours, which is then not easily modified for the use of people with visible disabilities.

In the same way, this flash technology obliges to pack into a singular LMS (Learning Management System) not only the images but also the associated texts and corresponding audios, which in the case of adapting them to other languages, would imply a very important job, making it impossible to overview this linguistic migration.

Being already one difficulty, the greatest is found in the standardization in carrying out the content and LMS for the platform and if they are not developed in agreement with the set standards (Anido, 2002; Foix y Zavando, 2002) that

now-a-days are being overseen to allow the fluent and simple exchange of content between platforms.

Taking into account this limitation it needs to be noted that the evolution in this sense has become very important in the last few years, but that when the project began to be carried out this necessity had not yet been expanded, nor did it have the level of importance as it does today.

Even so, it appears that the programmers for this platform have been able to adapt, with a relatively simple job, the content and corresponding interactions to other types of platforms, due to the standards of compatibility now-a-days.

Nevertheless, the fact that the content has been carried out according to the minimum requirements, that the exceptional implantation of Spanish and that the subjects incorporated in the platform are nuclear and common for anybody that finalizes these studies, is a competitive advantage, without doubt.

From the point of view of the hardware and software requirements, the platform is not especially demanding, which allows a simple use and a maximum circulation. Nonetheless, it presents an irregular operational error when used with a different navigator other than 'Internet Explorer'.

The presentation on the screen of the 'Educans' content uses navigational programs like 'Netscape', 'Eudora' or 'Mozilla' even if it is true that they are for minimal use amongst the common Internet users comparatively speaking with the use of 'Internet Explorer' – it does present some difficulties.

On the other hand, it is really an advantage the fact that this platform has wanted to make a decided bet – and not without risk – as regards the content in detriment to other 'frills' like 3D animations or striking visual effects.

In this sense it is clear that in order to resign or permit this weight of information that has to travel on the net to be more lightweight, and therefore this platform is not a hostage to the 'connectivity', until the point that it allows a fluent access to the content even with a 'modem', which permits its use in population groups where the connectivity is not so established as in larger cities.

On the other hand, the structuring in databases in MySQL

(My Structured Query Language) also has its limitations.

From a technical point of view, without doubt, the platform that the researchers have investigated achieves only too well the minimum requirements.

Then again, from the point of view of the pedagogic processes that beat in the background of this platform and the tools that it implements for its achievement, there are some considerations that we want to bring in here.

From the beginning it is perceived that the 'tone' of the content and the treatment of it in the types of exercises presented have a noticeable behavioural slant (Ortega, 2002).

It appears evident on first glance that this platform lacks some tools which are common in other platforms that are already in circulation on the market (Edutools, 2006).

It does not have, in an intentional way, tools that allow synchronized communication, and it only has a limited tool that allows a temporary communication between teacher and student.

Due to this limitation that the platform presents, the study can say that the same does not present different scenes of collaborative learning, given that it is not planned as part of the structure that the user can interact with another student in a synchronized or temporary way.

In the same way, the platform does not contemplate the possibility of transferring files either. This restriction goes beyond the internal communications between 'student' profile users, in the sense that this limitation in the transferring of files also applies to the exchanging of files for other applications.

Then again, the platform contemplates, through the figure of 'content editor' the incorporation of exercises or thematic units to a 'top-up' of units that can be shared with other potential users. It can be said that this platform includes administrative tools that allow teachers to incorporate exercises, marks, observations, messages etc. for their students, not only for the individual but also for a group.

In any case, 'Educans' does not present enough flexibility so that a determined user can organise a 'personalised educational system'.

Consequently with the revising concept where this educational tool comes from, it does not contemplate the presence of a diary for the student, in which they can note down doubts, tasks, pending work or any other considerations.

The designers and ideologies of 'Educans' think that, from the perspective of a revision tool, these notations should be reflected by the student on paper or other work that they have (the class book or class exercises), which should be accompanied in the use of the platform where noting down such queries for which they have to ask for help or guidance in the session about the corresponding subject of study.

'Educans', in its design, does not contemplate the communication between users as a relevant didactic element.

Somehow it is understandable given that the tool is conceived as a form of revision and, in no way tries to substitute the function of the teacher or has pretentions of being a tool that can function independently in order to make the learning process easier for those students in compulsory secondary education.

From this point of view the authors understand that there are no other tools that are similar in other platforms like the 'chats' or 'forums' or even 'agendas' or 'bulletins'.

None of the tools or options that 'Educans' has, for the reason that have already put forward, are to be considered as a form of revision.

A further restriction that the platform presents is the fact that it does not rely on a 'library' or a help tool that reaches further than the technical or functional help information. In fact, the only presence of some form of help is in the administrative part of the platform and not in the part dedicated to the explanation or carrying out of the exercises. This question has, as is normal when the researchers are faced with this type of analysis, two points of view; on the one hand those who follow the authors of this tool that defend that the platform should, from its design, be sufficiently intuitive so that the presence of a help option is unnecessary, and on the other hand the stance of those that understand that a 'help' or 'tutorial' allows us to get to know the tool that we are using more quickly and in more depth. If we consider that this platform has as its principal user the 'student' and that they get used to investigating, analysing and discovering by themselves the technological functions to which they have access, it does not seem that the absence of a helpline is an exceptional difficulty. Nevertheless, given that in this section what they want to reflect are the deficiencies that they have detected in this study, and believe that they have to include this question.

This vocation of 'reviser' that supports the platform has meant that some type of 'didactic guide' has not been incorporated, for example, in a strict sense for the user, a document that lets them get to know beforehand the total content and structuring, like a relationship of resources that count or estimate the time required to complete the exercises. It does not rely on a general presentation of a 'study plan' either.

In any sense the researchers did not want to give the impression of an incomplete product, unfinished or inadequate.

There is no doubt of the multiple strengths of this tool and the success that the use of it has meant for students, compared to others who have not used it.

From the perspective of pedagogic or didactic strengths it is necessary to point out that this platform relies on the possibility of carrying out evaluation tests online, its own correction system that marks independently, grading and evidence of exercises for future tracking of the progress of the user; that organises with exceptional proficiency the registers of the activities that the users have completed with the platform; allows a simple organisation of different types of exercises (quite broad, up to three); it has a system of feedback so that each user 'student' has instant knowledge of having answered a question correctly or not, etc.

The 'Educans' tool is configured and designed in such a way that it allows the incorporation and management of videos, although still today it does not rely on this possibility to have made a clear choice for the download size of the content to allow the transfer of information between equipment that is not especially suitable for the users connectivity or broadband.

As the researchers have already said, although the tool allows it, it does not have video images, therefore (if in any case it is not contemplated, they have referred to it earlier) it does not rely on image files that can be accessed in a more or less simple way, eventually, could extract audiovisual content to then be used in other contexts, or even, given that they are already digital, their publication and further use for a purpose for which they were not originally destined or designed.

Nonetheless, all of the observations that the researchers have contributed as regards the 'Educans' platform, without doubt, exceed many other tools on the market which, for the same public objective as 'Educans', are in reality a collection of texts in 'pdf' format with a series of activities, in the best cases without more animation or development than the text presents, are in reality, a step towards an electronic book as an alternative to the traditional text, but that they should not be presented as multimedia educational platforms. 'Educans', however, and despite the limitations that we mentioned above, positions the market with a platform of interest for this educational segment.

Conclusions and Recommendations

In their opinion and following the investigation, the researchers think that the future of distance learning technologies in the average teaching sector depends as much on the technological advances, the interests of the students, even out of the enormous list of advantages that the educational theories can contribute, not even in the teaching vocation (Aguaded, Fandos y Martínez, 1996), but rather the ability that they have to attract teachers to management tools in their everyday work, an ability which, without doubt, can be seen growing in a way in which they are able to present them with simple and practical materials, with which we can save time and effort and work efficiently (Cabero, 2000).

When they set out with this investigation, they wanted to meet a series of objectives, amongst them the objective explained in the following lines: the rating of the platform (for the moment the only one that they know) that incorporates the minimum curricular content that the government has appointed for the compulsory secondary education in Spain (in concrete for the subjects of Mathematics, Science and Language).

They understand that the aim of the product was to serve to interest both teachers and students. Indeed an exceptional difficulty in society nowadays is the different backgrounds that they all have, and therefore a common interest may prove challenging to find. According to the results obtained in the questionnaires, it can be said that this objective has been suitably reached.

After the experience of carrying out this investigation, they conclude that in average conventional situations for teaching and learning, the presence of the internet does not have to mean big transformations in the curricular elements (teacher, curriculum, student, strategies, etc.) These new means are integrated with the existing models broadening the didactic process in two directions: access to information and the explosion of the net as a means of communication.

Parallel with this, they conclude that an adequate teacher training process is necessary (Medina, 1990).

When the researchers presented this platform to the educational community, all of the teachers applauded the possibility of including and introducing activities, changing content, personalising messages for their students and proposing different activities to students in the same group.

Following the investigation they have checked how the teachers and participants have made use of the potential of the platform. They are inclined to think that it has been more due to the lack of training or being unable to control it adequately than due to other reasons, but the fact is that the tool has been absolutely underutilised.

The researchers still have several pending projects to carry out, for example, to analyze the timetables when the teachers used the platform. In a first estimate they have been able to show that it has been used with frequency during the hours of class, but that there were few examples of its use outside of the classes. The students, however, tended to use the tool in far more varied hours. This demonstrates that the tool has been sufficiently intuitive for some of the participants, at least in the theory part, but that despite its simplicity it has not taken root particularly with the

teachers. The administrative part of it did not have an important use of the message system, the possibility to carry out control checks, or has been made the most of in order to extract reports with data containing student's results, that could have been of interest, for example for a tutor.

With this investigation we have been able to demonstrate that when a student is the protagonist in a learning process and can regulate the rhythm of the said process, as the platform allows, the results improve. It has been like that in practise for the cases subject to this study.

In terms of the content and structuring design it can be said that the platform of this study does not include or consider how such transversal materials like education for peace, coexistence and health… A question that not even seems to have been contemplated at the hour of design, if it is true that the content that 'Educans' houses could include these considerations, not only within the 'subject' as creating a 'subject' (as is the case of 'spelling' that is transversal to all levels of education).

They have a long project ahead of us, to compile, form graphs and tables, process and analyse data which, in a collateral way, they have compiled with the use of the platform on behalf of teachers and students at different moments and for different reasons. Data that they hope will give us clues to the authentic interests that the different types of users that tried out the platform have. Data that, besides other factors will allow us to confirm which sections are more or less intuitive, which are more or less used and therefore, training strategies, use and implementation of many questions that they are ascertaining and anticipating that will allow us to improve the service and the results from it.

The success of this kind of tools is conditioned two basic elements:

- being interesting for teachers;
- being interesting for students.

To archieve both elements is basic to propose one platform that allows to the teachers incorporate exercises and activities in an easy way and that the same has a powerful administration tool that facilitates the traking,

control and evaluation as well as the adaptation to the official scholar curriculum.

In the case of students, the main interest is in the inmediated feedback, the easy use and the variety of the proposed activities.

Basically these two circumstances are the basic recommendations that the researchers propose derivated of this research.

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