

BLENDED TEAMWORK: THE FACEBOOK EXPERIENCE

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ABSTRACT

The business world increasingly demands workers who can master new technologies to develop collaborative networking. Social networks are being used in business environments more and more, particularly the large incursion that Facebook currently has. Therefore different online tools, especially Facebook in combination with face-to-face meetings were used for to develop teamwork by students from the last year of the Bachelor of Business. The aim was to promote the development of practical work in a team of future workforce through the intensive use of new technologies to carry out work and communication between the different members of the group. The results obtained were far from the results expected. The students based their work on intensive face-to-face meetings carried out and telephone use to the detriment of new technologies, leading to a reluctance to using Facebook for collaborative work.

JEL: A22; I23; M15

KEYWORDS: Blended Teamwork, Facebook experience, collaborative networking

INTRODUCTION

Teamwork is one of the key skills demanded by companies, as well as knowledge of new technologies in the environment of collaborative networking. Different studies conducted by Spanish Universities' Occupational Observatories reflect this, showing the main skills that businesses demand from future graduates. To meet this demand from businesses, universities must act to provide students access to these skills in their training programs. It is necessary to be aware the European Higher Education Area and the Bologna Declaration have also included the acquisition of skills in the educational environment to be developed in organizations under their guidelines.

Furthermore we must note there are more and more Internet users that use social networks to contact friends, virtual acquaintances, colleagues, family, etc. This social interaction leads to people talking about various topics, including products and services offered by companies, that is, organizations in general. There is a large increase in users connected to different social networks which include various professionals as well as enterprises. One of the most widely used social networks now, for small, medium-sized and large enterprises is the social network Facebook. This social network enables networking of different users, group work, and free applications. It is not necessary to receive an invitation to sign up and it is possible to stipulate limits when contacting with other users. All these features lead to selecting the Facebook network to carry out group work. Because of the nature of the general studies at the University of A Coruña, work is carried out combining online tools and face-to-face meetings, referring to the latter as the usual way of developing group work. This research was carried out after an easier initial experiment Sánchez & Brenlla (2010).

This article is divided into different sections; the first section is a review of the literature about the issue addressed throughout the article. The following explains the method used for developing the questionnaire, the main research tool. Then we discuss the methodology which explains what the questionnaire is like, what population the study is for and sets out the theories. Immediately afterwards both the quantitative and qualitative empirical results from the open and closed questions on line questionnaire are described. In this final section the results are looked at in detail and conclusions are

drawn up, as well as future investigations. In the last three paragraphs, we express our gratitude to the reviewers because thanks to them this research has been brought to light and has also allowed me to improve in this research and future projects. Following this are the bibliographic references and finally the outline of the bibliography.

LITERATURE REVIEW

Educational innovation projects (IPPs) Dasi, and others (2007) identified key areas. These are student work potential, paying attention to competence objectives, coordinating with the group teaching staff, paying personalized attention to students and highlighting the use of new technologies in the classroom. Gonzalez & Wagenaar (2003) identified it as competition for the set of interrelated and interdependent factors. The first being knowledge (namely, the knowledge needed to perform an activity and / or to gain knowledge, ability to know and understand). The second is skills (knowing what to do, be it solving problems or performing a task, academic or not, competence). The third being attitude (knowing how to adapt, take part in and contribute to sustainable development of their environment). And the last is, values (knowing how to behave, assuming the values as part of the way of behaving, respecting others and living in a social and environmental context).

Perez and others (2003) believe that multimedia material is an excellent educational tool, highlighting among its properties flexibility and accessibility. Cano (1994) defines educational software as a set of computing resources designed to be used in the teaching-learning context. Perez, and others (2003) identified as main advantages the use of the resources mentioned by Cano. Among these is using material with a multimedia system increases student motivation. Software usually has many elements that are responsible for keeping the students' attention and interest and for many people the simple fact of working with computers has a playful connotation. The use of multiple channels to show information increases the effectiveness of the teaching-learning process. In addition, many of these programs often include self-assessment sections that offer the user feedback on their learning process.

Its flexibility allows self-guided learning and does need more than a computer and can be used at anytime, anywhere. Harasim and others. (2000) tells us that network learning is based on both overall interactivity and collaborative learning; it also includes access to educational resources and activities, not only at specific times, but throughout life identifying it as an emerging model. Castells (2001) identifies it as the Internet technical partner model, understood as the organizational form of our society's communication, not appearing as a single technology, forming the material basis of how we maintain relationships, work and communicate. Dillenbourg (1999) presents the learning process as a group of students engaged in a coordinated manner during a specific being able to solve a problem or perform an activity which can be considered collaborative.

They provide opportunities for collaboration, communication and production skills to work in teams using virtual environments (Harasim, Hiltz, Teles and Turoff, 2000). McClintock (2000) brings us new technologies, specifically telematic systems which are interesting ways of introducing alternative pedagogies and promoting changes in educational structures. In terms of digital skills covered in the Lisbon Strategy framework, the European Parliament and the European Union Council in 2005 include safe and critical technologies of the information society (IST) for work, leisure and communication. It builds on basic ICT skills: the use of computers to gather, evaluate, store, produce, present and exchange information and communicate and engage in collaborative networks by the Internet. Platforms have created license fees for collaborative work. In our case the application of Web 2.0 allows us to use free online tools, such as the social network Facebook, which is important because of the current economic crisis we are living and for developing teamwork.

A General and Methodological Approach towards Web Support Questionnaires

The tool selected to obtain information from the students and carry out diagnostic research is the questionnaire on the web. The free online tool belonging to the online software package provided by Google, Google docs, and spreadsheet software in the option “form” was used. As an online questionnaire it has advantages and disadvantages. Among the advantages identified as a tool questionnaire, the information provided is quantifiable, resulting in greater normalization and promoting standardization. As advantages for the respondents; they can choose the timing and location, as well as the option of filling in the survey or not. The disadvantage highlighted is the length of the survey. To make reading and answering easier it is divided into blocks, analyzing teamwork, the use of new technologies, demographic data, identification and assessment of the different types of tutoring used. The Web format does not imply a simple change of hardware, from paper to electronic, but the use of the advantages of the survey in web format. The questionnaire provides benefits for research staff. Data is sent directly to hardware provided by Google web docs, which avoids manipulation of personal data by intermediary staff.

This avoids mistakes as well as errors in data entry and the agility in which they can be converted into different formats for use by different statistical software for further study. Among the advantages identified in research by Díaz García (2008) are; minimum cost, quality, immediacy, interactivity, representation and automatic data processing. One of the ways identified to improve the use of the online questionnaire therefore increasing the response rate is the use of incentives (Bauman and others., 2000, Cook and others., 2000, Frick and others., 2001; O O'Neil and Penrod, 2001; Downes-Le Guin and others., 2002; Bosnjak and Tuten, 2003, Porter and Whitcomb, 2003; Birnholtz and others., 2004; Tuten and others., 2004; Göritz, 2005; Göritz, 2006; Heerwegh, 2006) and personalizing invitations (Joinson, 1999; Cho and LaRose, 1999; and Reips Musch, 2000; Heerwegh and Loosveldt, 2002, Kelly and McKenzie, 2002; Porter and Whitcomb, 2003; Heerwegh and Loosveldt, 2003; Heerwegh, 2005). Students are encouraged to fill in the questionnaire by offering them a higher mark in their diploma thanking them for their participation and not provoking negative comments. They are also informed that they are contributing to improving the subject and group work for future courses. The use of incentives increases participation and shows the tendency to reduce the number of incomplete responses (Bauman and others, 2000; Musch and Reips, 2000, Frick and others., 2001; Downes-Le Guin and others., 2002, O'Neil and others., 2003; Bosnjak and Tuten, 2003; Tuten and others., 2004; Deutskens and others., 2004;2006; Heerwegh, 2006; Göritz, 2006) which justifies their frequent use.

The first survey and test survey took place during the first quarter following completion of the first part of the work carried out in the group using a nonelectronic format. The second survey shows the work carried out during the second quarter in electronic format showing the members of different teams for assessment.

DATA AND METHODOLOGY

Methodology

The research corresponds to the methodology in the nonexperimental mode survey for the following reasons (Cohen and Manion, 1990, McMillan and Schumacher, 2005; Torrado, 2004). We chose to collect information on the variables of interest through an on-line questionnaire, created by Google Docs online tool option form. The surveys collect data at a specific time for various purposes: descriptive, rational and for explanation. In this case a survey form to be filled in within 5 days was uploaded after the deadline for handing in work. As an incentive we gave a slight increase in marks for filling in the form, letting them know that their participation is valued and that their comments will not be reflected in it, apart from asking for their honest opinion.

The survey method is frequently used in research in education. In our case it gave us an idea of the perception of the usefulness that new technologies have in combination with face-to-face meetings. Whether it has favored teamwork or improved the effectiveness of interaction within group members by improving the quality of the work they do. And if the time needed to perform tasks assigned is reduced and the analysis of the usefulness of the work carried out by students.

Features of the Questionnaire

The instrument used in the survey has been developed as a source of information. The first survey was conducted testing the first quarter before the end of the work carried out during the year. In this first survey we obtained the first results of work completed in the period from October to February 2010. It had to be filled in during the first term exam, once the deadline for the first part of the group work had finished. In this first survey the delivery procedure of the proposed work was analyzed in the first phase of the project. It consisted of 70 items using the Likert scale of 1 to 5, where 1 was the lowest score and 5 the highest. A second survey was conducted to obtain the data for the second phase of the project that we are presenting in this study. The latter was formed by 86 items using the Likert scale of 1 to 5, where 1 was the lowest score and 5 the highest. We included 5 opinion questions about the advantages and disadvantages of the tools used and a space to express whatever they wished and had not been asked before. The need for carrying out surveys is based on the analysis of the advantages and disadvantages noticed by learners to develop their teamwork and its progress using ICT as support. The experiment rating as well as the improvement proposals recommended by students should be included.

Population and Study Sample

Table 1 schematically represents the demographics of the study sample.

Table 1: Demographic Information from the Study Sample

N		157
Gender	Men	62%
	Women	38%
Quantity of work groups	13	
Connection with the labour market	Reconciling work and studies	29%
	Not reconciling work and studies	72%
Age (average)	24	

The population is made up of the subgroup of 157 students tutored by the Organization and Management of Companies teacher. The students belong to the third year of the Business Studies Diploma which is divided into 13 groups that include 12 or 13 members each during the second quarter of the academic year 2009-2010. The entire study sample carried out practical work using Facebook as a condition for group work. As for gender, 62% of the sample is women and 38% men.

As we are dealing with the final year of the diploma, the variable related to working and studying simultaneously has been introduced. 29% of students taking the course and carrying out practical work both work and study at the same time, while 72% dedicate all their time to studying.

Procedure

The approach is because of the characteristics of the design called basic correlation, since they are not intentionally manipulated variables, using SPSS (version 15.0). The main analysis technique used was: Pearson correlation for the analysis of interactions between variables. Open questions have been subdivided according to the views expressed by students. They stated the main advantage of working with the Facebook tool to develop teamwork and its main drawback.

Hypothesis

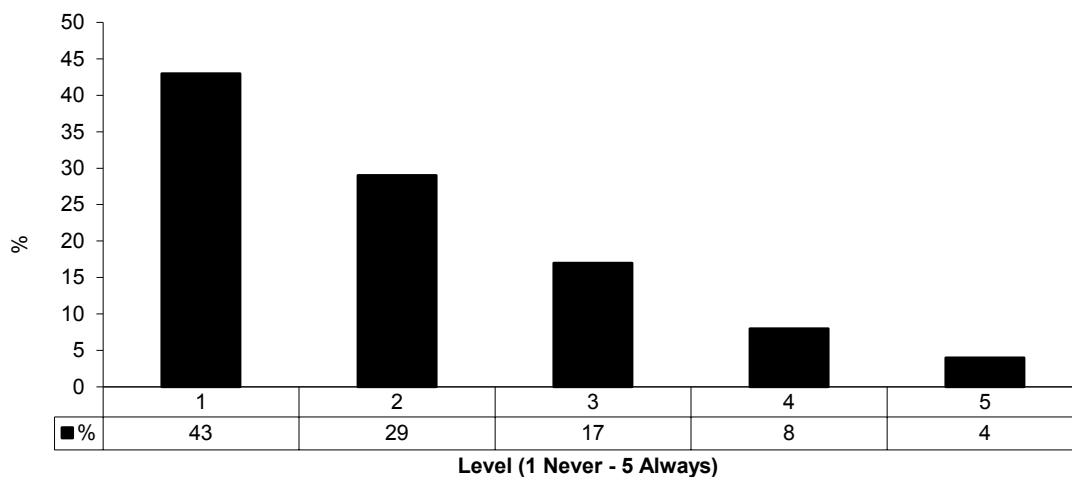
The general hypothesis is the following: using the blended approach, teamwork has a positive influence on carrying out teamwork. This is based on the assumptions set out below: The more you use the blended methodology, the shorter the time needed to perform assigned work tasks. The more you use the most useful blended approach, the more obvious it is in the work. The more you use the highest quality blended methodology, the higher quality work you achieve. The more effectively you use the blended methodology, the more effectiveness it has on group interaction. The more experience you have using ICTs, the less time needed to perform assigned work tasks. The more experience you have in using ICT the more effectiveness it has on group interaction. The more experience you have using ICT's, the more it favors teamwork.

EMPIRICAL RESULTS

Set out below are the first results that we see in the analysis of the use of the virtual tool Facebook. Below we show the results of the closed questions put forward in the survey.

Figure 1 shows to what degree students have used new technologies in previous courses. Level 1 shows that they have never used any and level 5 shows that they have always used new technologies. We must consider that they could choose intermediate levels of response.

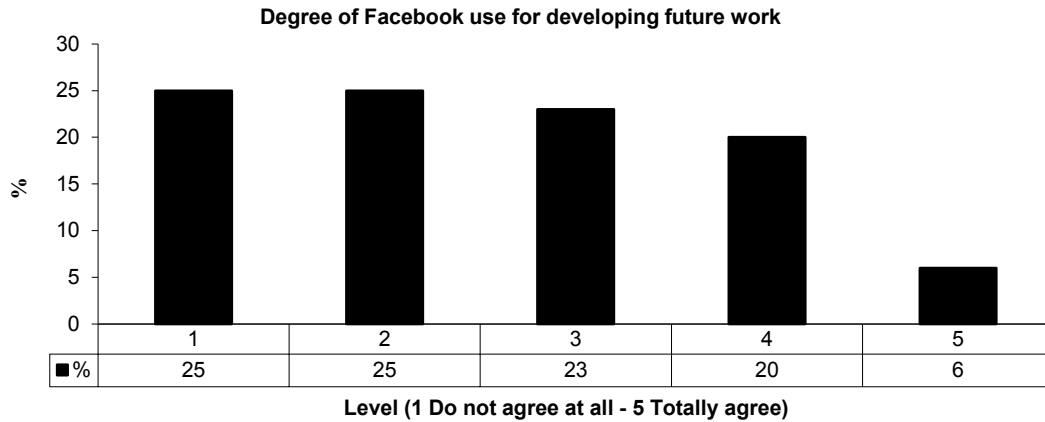
Figure 1: Extent of Use of ICTs in Previous Years



In the experiment of using new technologies carrying out work in virtual groups to carry out the work requested in class before this course, 43% said they had never used new technologies to work in virtual groups. 29% had used almost all the new technologies for developing the virtual work requested. 17% were in a middle area. 8% had sometimes used new technologies to carry out class work and only 3% stated that they had always used new technologies when carrying out their work.

Figure 2 displays the results in which students expressed their intention of using the online social network Facebook in the future. The responses are graded in levels, a student who selects level 1, the lowest level, states that they do not agree with the statement, which is they will not use Facebook in the future. Level 5 is the highest level; these are students who agree with using Facebook to carry out future work. Students can choose intermediate levels of response in the range 1 to 5.

Figure 2: Degree of Facebook Use for Carrying out Future Work.

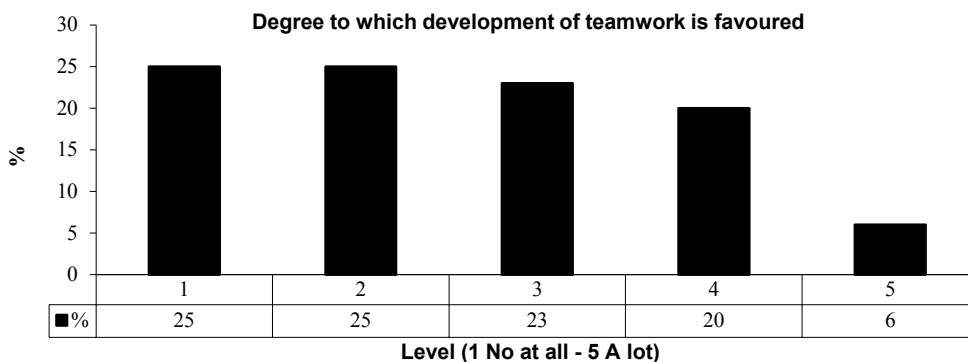


Twenty five say that they will not use this tool for future work because they strongly disagree with the use of Facebook for teamwork. Another 25% state they disagree with the use of Facebook for carrying out teamwork. 23% are in an intermediate range agreeing and disagreeing on carrying out tasks through Facebook. 20% responded positively stating that they agree on the future use of Facebook in carrying out teamwork. 6% of students are in full agreement on the use of Facebook for carrying out teamwork in the future. Therefore, 50% of students are reluctant to use Facebook for carrying out teamwork in the future compared with 26% who show a positive intention of using it and leaving 23% in a middle ground between using and not using Facebook.

The following is the analysis of the use of online tools for virtual work (Facebook, email, website) and combining face-to-face meetings with questions. These questions are related to the usefulness and effectiveness of group member interactions. Whether it has improved the quality of the work carried out, if the time needed to perform tasks assigned to students has lessened and finally students' perception of the usefulness of the work carried out.

Figure 3 presents the analysis of teamwork carried out and whether it has favored the use of the blended method approach in carrying out group work. It is possible to choose between levels 1 to 5 in the responses, 1 being the lowest level not helping at all and 5 the highest level helping a lot, but you can select intermediate levels.

Figure 3: Degree to Which Carrying out Teamwork is Favored. Blended Methodology

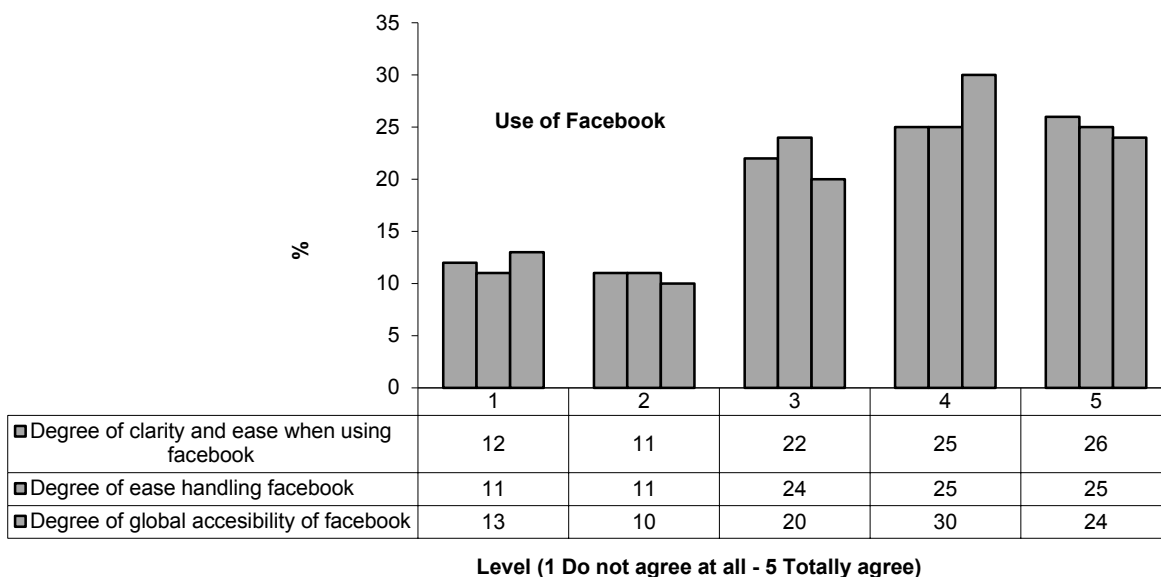


On the related issue of whether the use of online tools for virtual work (Facebook, email, website) and combining face-to-face meetings has favored carrying out teamwork: 5% stated that it has not helped teamwork in any way. 15% representing a negative view in which it has not helped carrying out teamwork at all. 28% state the combination of online tools used for teamwork has had little effect. 39% state the use of online tools and face-to-face meetings has helped them in somewhat and 12% state that carrying out teamwork through a combination of virtual work using online tools in combination with meetings has helped them a lot.

In response to the question of whether learning to use Facebook has been easy for me, 18% do not agree with this statement. 11% agreed to a certain extent that learning to use Facebook has been easy. 24% are in an intermediate range. 25% agree that it has been easy to learn how to use Facebook and another 25% strongly agree that it has been easy to learn how to use Facebook when carrying out teamwork. 50% express ease of use, 24% are in a middle range, and only 22% do not consider Facebook easy to use.

In Figure 4 we analyze the ease, clarity and accessibility in using the social network Facebook when carrying out teamwork. Students state their opinion by giving values from level 1, showing that they do not agree, up to level 5, which shows complete agreement. It is possible to choose mid-level responses.

Figure 4: Use of Facebook



The students mainly identify with response levels 3 to 5, that is, from the intermediate level to the maximum level where students strongly agree. Between 73% and 74% of the students consider the online tool Facebook to be easy and accessible. At the other extreme are students who identify with the response levels 1 and 2, being 26% and 27% of the students, stating the social network Facebook is not so easy, clear or accessible.

In the statement that Facebook is clear and easy for me to understand. 12% say they totally disagree, 11% disagree, 22% being in the middle ground. 25% agree the social network Facebook is clear and easy for students to understand. The highest percentage being 26% who strongly agree the social network Facebook is clear and easy to understand. 51% of students stated it is easy for students to understand the Facebook tool, while a negative 23% do not find it easy and clear to understand.

In the statement that claims that learning to use Facebook has been easy for students, 11% say they disagree. 11% agree with the statement to a certain extent, and 24% are in the middle ground. 25% of students agree a little more that the use of Facebook is simple. The other 25% represents those who are in full agreement with the easiness of learning how to use Facebook. 50%, which is a high percentage, stated it was easy to learn to use the online business tool Facebook. 24% are in an intermediate section. 22% do not agree with the statement that it was easy to learn to use Facebook as a teamwork tool. 13% of students generally consider Facebook as being possible to use but do not agree at all that it is generally considered possible to use. 10% did not consider Facebook as being usable. 20% are in the middle ground. 30%, still representing the highest percentage, overall agreed it is possible to use Facebook. 24% strongly agree that it is possible to use Facebook globally. The representative percentage, 54%, says they positively believe it is possible to use Facebook.

Correlations

In Table 2 below we can only see the selection of the main correlations that come up positively among the different items.

Table 2: Main Correlation amongst Items

Positive correlations			
Related items			
Age	Works and studies	r=0,230	p<0,01
Age	Teamwork	r=0,191	p<0,05
Gender	Clear and easy	r=0,160	p=0,05
Gender	Previous use of Facebook	r=0,330	p=0,00
Time decrease	Quality	r=0,618	p=0,00
Time decrease	Effectiveness	r=0,568	p=0,00
Time decrease	Carrying out teamwork	r=0,564	p=0,00
Use of Facebook	Quality	r=0,246	p<0,01
Effectiveness	Group work	r=0,790	p=0,00
Effectiveness	Means	r=0,336	p=0,00
Effectiveness	Communication	r=0,336	p=0,00
Interactions	Simple	r=0,703	p=0,00
Interactions	Useful	r=0,817	p=0,00
Clear and easy interactions	Simple instrument	r=0,906	p=0,00

The highest correlations are those related to the interactions of the online tool Facebook and simplicity and clarity. Those that correlate to a lesser extent are related to age and teamwork as well as age and if you work while studying. Other popular items most correlated with others related to the team and work, not the tool itself, are the effectiveness and time decrease.

We can see the following results when calculating the correlations of the closed questions: Age correlated positively with the work, which is obvious, we assume the older they are the more likely they are to study and work ($r = 0.230, p < 0.01$). Gender correlates with having previously worked using Facebook, that is, being a woman means it being more likely ($r = 0.330, p = 0.00$). The fact they consider lessening the time needed to perform assigned tasks correlates positively with believing that quality improves ($r = 0.618, p = 0.00$) and work effectiveness ($r = 0.568, p = 0.00$) and favors work completion ($r = 0.564, p = 0.00$). The fact they believe that it improves the quality of work also correlates with the fact that those who have used Facebook believe it improves their work significantly ($r = 0.246, p < 0.01$). Those who believed that it improves the effectiveness of their interactions with the rest of the group positively correlated it with helping group work ($r = 0.790, p = 0.00$). They also think it is a suitable way to work in teams ($r = 0.396, p = 0.00$) and for communicating among group members ($r = 0.336, p = 0.00$). Those who believe that their interactions with Facebook virtual work has been effective relates directly to believing the interactions are simple to carry out ($r = 0.703, p = 0.00$) and useful ($r = 0.817, p = 0.00$). Women more than men believe that is a clear and easy to use means ($r = 0.160, p = 0.05$). The higher the age, the greater the belief that this system encourages teamwork ($r = 0.191, p < 0.05$). The fact the interaction created by virtual work is clear and easy, correlates positively with believing that learning to use the instrument was simple ($r = 0.906, p = 0.00$).

Advantages and Disadvantages of Using Facebook Tool When Carrying Out Teamwork

Here we present the comments made by students about the open questions when identifying the main advantage and disadvantage in carrying out teamwork using the Facebook tool. In the open question about identifying the biggest drawback in using the Facebook network when carrying out teamwork run by the students, we can find the following types of responses:

First, the biggest problem that occurs when working is uploading the files needed. Unless they are video files or photos of the group working, it does not allow you to upload other types of extensions needed to share with other group members. Second is the inexperience and little flexibility in the use of new technologies such as developing a file attachment. And the disadvantage resulting from this link often resulted in error messages. These first steps involve great loss of time when it comes to carrying out work with the need to share files that do not allow direct uploading of files with the available online tool to create Facebook groups.

Another problem raised by the students arises from the habit of not using the social network Facebook, therefore, not looking regularly at the work group messages and in particular the social network Facebook. This means that what at first we could consider a means in which much communication among the group could take place, becomes a barrier because of not using new technologies in general. Not everybody may have had a Facebook account before carrying out practice work and this means the lack of continual use hinders student interaction among team members. This last problem we identified arises mainly from pupil ignorance, not knowing how to link Facebook working group messages to the working group e-mail, although many of them have and do use the e-mail as a means of communication. Even when they have this tool available, the slackness in reviewing it shown by members of the working groups of students is remarkable. 10 of the 13 groups formed to carry out the work as a team express the complexity of using the wall for communication and discussion. Among the disadvantages expressed is the lack of order in the messages, an unorganized comments exposition and difficulty interacting when carrying out a debate. It is necessary to highlight that doing extra practice on the Facebook discussion group was proposed to all the students belonging to the group.

Not all groups used this section, using the forum that might have been used to develop the work. Only two of the discussion groups created debates in this section. Among the advantages cited by the groups using this application, we can see it is possible to discuss all the issues separately and in an orderly way using the wall for messages which we might call current and communication. In particular these two groups used the wall for general asynchronous group communications in contrast to the points of discussion in the forum, also using asynchronous communication, but on specific topics to be discussed by the group. Therefore, the first disadvantages framed in 10 of the 13 groups that did not use the forums section could have been avoided with the benefits the other two groups showed when it came to the usefulness, ease and order. Among the students surveyed, the disadvantages of using Facebook for carrying out work are as follows: the complexity of understanding Facebook, its use and the lack of habit using it in this environment as with any other network environment. Mainly the students who had problems using Facebook were those who do not use Facebook, that do not have accounts and do not use it often or simply created the account but did not use it.

Other students more reluctant to use Facebook are those who use other social networks and show reluctance to using any other than the one they usually use. It is worth pointing out that students used two social networks; Facebook for specific communication and other social networks for regular communication even though the two networks did not allow them to share files. To do so they had to use different online tools to share the work in text format documents. Other statements made by students are that they do not like using it because it seems a personal environment and leads to distraction. They are

able to talk to their friends, play, see advertising which they considered anything but a suitable working environment and this also leads to distractions.

A small percentage of students state the environment created on the social network Facebook is not productive and is inappropriate for carrying out any work on an educational or business level. The lowest percentage is represented by those who state they totally oppose carrying out work and the use of the social network Facebook. 1.27% is worried about the distrust related to privacy. 20% stated in their answers that they do not have any objections to using Facebook for carrying out work.

The main problems that arise when carrying out work on Facebook are because of the lack of habit of using new technologies. The problem of the speed at which work is carried out arises before the lack of use of ICT tools in general. The following are the responses found in the open questions about identifying the biggest advantage of using Facebook when carrying out student teamwork. They highlight communication, usefulness, speed and positive contact. Within the communication environment they highlight the ease of communication between different group members as they use the same social network in which they can write messages sent directly to their email.

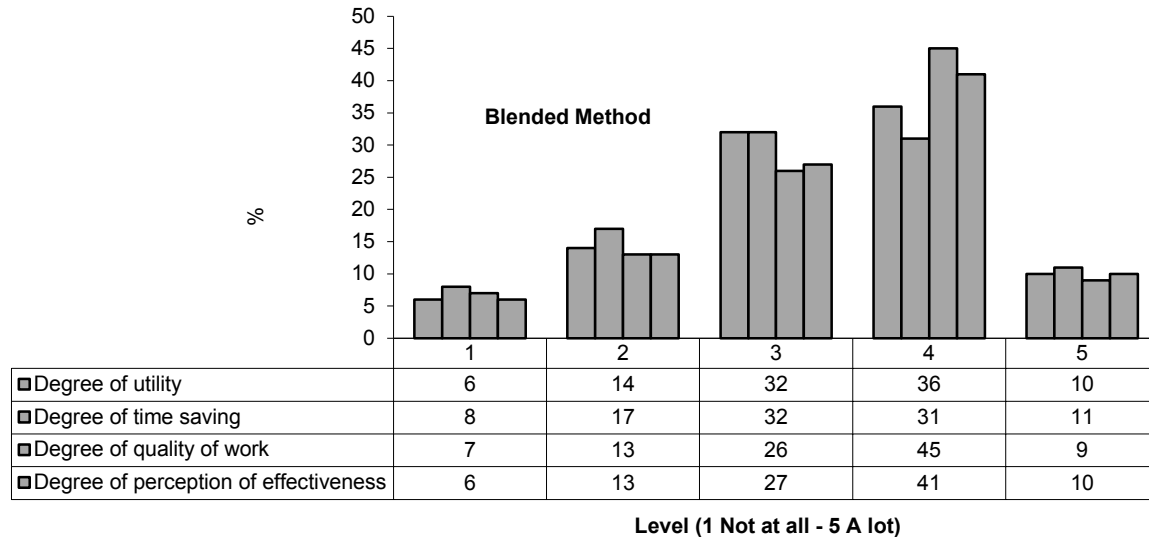
Another advantage highlighted is the use of asynchronous communication. This simplifies communication at different times from different locations where temporary classroom space is no longer a problem. Providing an environment of total integration lessens the need for face-to-face meetings, as some of the topics that need discussing appear in this way. The tool used for communication among students in the social network Facebook is the chat room where they are able to take part in discussions. As for asynchronous communication, they have used the following available tools: the discussion forums, wall messages to make comments and raise debates and messages sent through Facebook to communicate with all members. It allows asynchronous discussion in the spaces created for it by allowing better communication and orderly participation of the team members.

Facebook allows decision making without the need for face-to-face meetings saving time and simplifying interaction with other members without the need for simultaneous and face-to-face meetings. Another of the advantages of using Facebook as a tool for group work is the access to information, which means that this information is accessible to all group members. Regular use of the network for personal and leisure reasons helps knowledge, understanding and use of the tool for group work. Students who already had an account on Facebook showed ease and quick understanding of the use of group work. Those students who have accounts in other social networks showed ease when using and understanding group. But they made negative comments about the difficulty in using Facebook for those students who do not have accounts on any network or on Facebook. It is necessary to highlight that the students who use social networks stated that speed, timesaving and convenience are advantages of using these networks. This is in contrast to those who did not use or simply did not have an account on any social network. 23.56% state that using Facebook for carrying out teamwork has no advantages.

RESULTS

Figure 5 shows the results of students' opinions when evaluating the use of the blended methodology and the use of different online tools combined with face-to-face meetings. Usefulness, timesaving, quality of work and effectiveness using this methodology when carrying out teamwork were evaluated. The responses were rated from 1 to 5, 1 being the lowest level, meaning not at all and 5 being the highest, meaning a lot. It was possible select intermediate levels.

Figure 5: Blended Method



Most of the students surveyed identified with intermediate response levels 3 and 4. They tended to believe the use of the blended methodology gives greater usefulness to the work carried out, saves time in its preparation and increases the quality of work. Finally, we can see the students believe that using this methodology increases the usefulness of the work.

Degree of usefulness. 6% of students, who use online tools to work in virtual teams using the social network Facebook, email, training platform Moodle and face-to-face meetings, believe they are not useful for the work carried out. 22 people, who represent 14%, responded that it helped them a little. In the middle ground are the responses of 51 students, representing 32% that consider it useful for the work carried out. Therefore, 20% of the responses provided by the students are at the lower range, 32% in the intermediate and 46% in the upper range. 16 people surveyed say they strongly agree that using a combination of online tools and face-to-face meetings is very useful.

The use of the social network Facebook, email, the Moodle learning platform and face-to-to face meetings is to carry out virtual work. 46% of respondents, representing 73 students found it useful for their work. At the highest Likert rating (4) there are 16 people, representing 16%. 57 respondents, representing 36% of the higher range consider it useful for their work. In the statement for the use of new technologies in combination with face-to-face meetings for carrying out work, 51 students, representing 32% are in the intermediate range. At the lower end are 6% comprised of 10 students surveyed, in which students consider both techniques of no use. Almost no use of this combination of tools is identified by 22 students accounting for 14% of students under study.

Degree of timesaving Blended methodology. The next item is related to the time it takes the student to perform the tasks assigned to team members. 13 students representing 8%, state that the use of online tools, software groups in the social network Facebook, email and training platform web, Moodle, in combination with face-to-face meetings does not lessen time at all. 27 students, representing 17% agree that a combination of online tools and meetings reduces some time. In the middle range is the largest number of students, 51 students, representing 32% of the total. It is closely followed by the 48 students representing 31% who consider the time of work execution greatly reduced using online tools in combination with meetings. 18 students representing 11% of the total said the use of the social network Facebook, email and Moodle training platform in combination with meetings greatly lessens the time needed to perform tasks.

Level of quality of work. 54% of students surveyed in the top range agreed that their quality of work had improved. 14 students, representing 9% expressed the view the quality of the work had improved a lot. The largest percentage of respondents in level 4 of the Likert scale is the students showing that combining online tools and classroom work greatly improves the quality of teamwork. 41 students representing 26% are in the intermediate range, stating the quality of work improves. 7% stating the quality of their work did not improve at all and 13% stating the quality improves slightly by using on line tools and techniques combined with face-to-face meetings.

Level of perception of effectiveness. Here we study the effectiveness of interaction with group members using online tools, e-mail selected by the students, the social network Facebook selected by the faculty and the use of the official platform of education of UDC in combination with meetings. 41% of respondents with a level 4 on the Likert scale stated a positive effect. 27% are in the intermediate range. 13% representing a level 2 on the Likert scale, find combining the use of online tools and face-on interaction with other team members an ineffective implementation. 10% of students expressed that combining virtual tools, Facebook, e-mail and the Moodle platform in combination with open meetings conducted by the team members improved effectiveness of interaction with other group members. The last position is represented by 6% of those students who state that these tools and techniques do not represent any effectiveness of interaction with other members of the group when carrying out teamwork.

The last item refers to whether the students felt that combining open meetings and the use of the different virtual tools positively promoted teamwork. The lowest percentage, 5% representing 8 students stated that it did not promote teamwork in any way. In second place is 12% stating that it has greatly promoted teamwork. This is followed closely by 15% of students who stated that carrying out the work led to little teamwork when combining online tools and open meetings. 28% of students in the middle range stated that online tools combined with face-to-face meetings have favored teamwork. A higher percentage, 39% of the students expressed the opinion that teamwork has been greatly favored when using different online tools for asynchronous communication.

Below are the data and relevant comments made after analysis with the SPSS statistical tool in which we obtain the Pearson correlation coefficients. First, I must say the figures are mostly positive and significant. They are from the student survey responses from the third year students of the Diploma in Business Studies enrolled on the subject of Business Organization. The exception of the figures is noted in the item related to the question, if the student had worked using new technologies in previous courses to carry out practical work. There is a significant correlation with the results obtained to the response regarding the use of online tools and open meetings in which students perceived greater value on the work they carried out. The Pearson correlation index assumes a value of 0.171 (*). Second we can find the Pearson correlation index 0.203 (*), a significant and positive correlation related to the students' view for carrying out practical work. It is conducive to say that using a combination of tools favors teamwork. Third, taking a Pearson correlation value of 0.209 (**), is the effectiveness of group interaction and the results obtained by using the same combination of online tools and open meetings. The fourth place has a most significant correlation using the online tool, social network Facebook showing a value of 0.427 (**).

Note that all Pearson correlation coefficients are positive and significant except for the item that identifies the questions about experience in using online tools in carrying out previous course work and the relationship with the social network Facebook. Below are the Pearson correlations referring to opinions on the use of the online tool used to carry out practical work by students surveyed. The most significant correlation which has a value of 0.346 (**), is presented by the reduced time needed to perform the tasks assigned to them. Second, the Pearson correlation value 0.336 (**), corresponds to the use of different techniques, online tools and open meetings for teamwork through the Facebook social network contributing to promoting teamwork. In third place is the perception of improving the effectiveness of students' interactions with their teammates, the correlation index of Pearson acquires a value of 0.331

(**). The fourth place has a Pearson correlation value of 0.325 (**) relating to the students' perception of the usefulness of the work carried out. With a value of 0.246 (**) and occupying the fifth place is improving the work carried out using a combination of online tools, face-to-face meetings and the Facebook social network as an online support for practical work.

The results obtained by the students, the use of Facebook as support for group work along with students' views of improving the quality of their work, group interaction and work, the usefulness of the work carried out and the reduced time taken to perform the tasks assigned has shown a significant and positive correlation when using a combination of online tools and open meetings. In contrast the item related to the experience in the use of new technologies in previous years is not a significant aspect to highlight. The Pearson correlation coefficient takes a negative value of -0.109 and a positive but insignificant value related to the social network Facebook 0.026.

CONCLUSION

The proposed hypotheses are adhered to, but you can make statements as to whether or not they are adhered to fully. This is because the data does not reflect any significance in relation to the previous experience of students. Therefore this approach cannot be confirmed. We realize that the proportion of students who state that they have used new technologies in previous courses is not very high. We can suggest that it is not a representative sample to contrast the hypothesis. Therefore it does not show significant correlation. We cannot say whether the more experience the students have using ICTs in previous courses, the shorter the time needed to perform assigned work tasks and the more effectiveness in the interaction of the group. We cannot affirm or deny that it favors teamwork.

If you set a strong and significant correlation with the assumptions made about the use of the blended approach, combining face-to-face meetings with the use of various online tools, the data shows the more you use the blended methodology, the less time needed to invest to complete the work assigned. It also gives more value to the work carried out by the team. The more you use the blended methodology, the higher the quality of work completed. The last hypothesis that we raised through more intensive use of the methodology is that interaction between group members is more effective.

Other data which is reflected is the willingness of students to use ICTs, which has not been considered. This situation has been assumed but should be considered in future studies. The degree of knowledge has also been assumed given the age of the students but has not been reflected in these demonstrations. This should also be looked at in future studies. The reluctance to use certain technological tools such as Facebook, has not been considered. This could be one of the reasons why the perception of different hypotheses could have a negative influence. It is recommended future studies check this as it can be significant in influencing different factors. Generically speaking we can say that using the blended approach has a positive influence on teamwork, taking into account the considerations previously expressed, which should be included in future studies.

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