LEARNING ABOUT SOCIAL ACCOUNTING IN THE KNOWLEDGE SOCIETY
A wiki-Webquest

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Abstract: This paper examines how new communication and collaboration technologies can influence university students learning process for the area of accounting and specifically for social accounting. Students should be able to know and understand that companies' reports must provide not only financial but also social information as a necessary complement to the first. Analysts are taking into consideration social issues when valuing companies and corporate governance, human rights or environmental behaviours have become key factors for investment decisions. In a general way, social accounting may be defined as the framework which allows businesses to account for their impact on society. For the Institute of Social and Ethical Accountability (1999), the terms social and ethical are taken together to refer to the organisational and behavioural systems within the organisation, and their direct and indirect impact on organisational activities with the stakeholders.

1 INTRODUCTION

Dodge (1997) defines a WebQuest as being a guided research activity, in which all or a large amount of the information that students use is obtained from the Internet. WebQuests are designed in order for students to make the most of the time by focusing on using information more than looking for it, and generating new knowledge through critical reasoning on different levels of analysis, synthesis and evaluation, as Dodge (2001) and Richards (2005) suggest. The possibilities offered by the WebQuest model in the development of student skills and abilities has raised interest among professors, who have implanted the method on different educational levels and in different areas (Donovan (2005), Sautter et al (2000) and Long and Stevens (2004) among others) and also among academics, who have analysed the pedagogical advantages of using said model and the development of its implantation process (Kanuka et al (2007), Zheng et al (2007), Allan and Street (2007) and Lim (2004)).

A large number of these studies coincide in affirming that the WebQuest model can (1) promote critical reasoning in students, as the WebQuest activity incorporates elements of reflection to be learned from, making it possible to compare, contrast and synthesise knowledge to construct new understandings; (2) facilitate the application of knowledge, as the proposed activity is developed in a setting that interests the students and is related with the problems that could arise in the real world; and (3) develop collaborative skills during the learning process as they require students to work in groups.

In this sense, different authors such as Johnson and Johnson (1990), Slavin (1992) and Biggs (2003), indicate that collaborative work generates positive effects on the students forming a group. According to Allan and Street (2007) collaborative work promotes student autonomy, making them responsible for carrying out one part of the project, as a contribution to the proposed discussion of the subject once the ideas and results have been pooled together. This, in turn, provides students with greater

fluency in the use of economic language and gets them used to working as a team, a work method that has been adopted by a large number of companies to deal with the complex problems that can arise in the kind of dynamic but uncertain environment that is so typical of a globalised economy.

However, according to Harrer et al (2006), a professor that wishes to implant a methodology based on collaborative work is faced by two challenges: controlling the time available to prepare the material and dealing with students' doubts, as well as examining and evaluating students' behaviour within the work group. To cope with this latter difficulty, we propose the use of Wiki technology. Dobrockey (2006) defines the Wiki as a web application that enables the user to create pages and/or edit the content of those that already exist, which favours the exchange and generation of ideas, and therefore, collaborative/cooperative work. The flexibility and ease of use offered by this tool has led to its incorporation in the business world, as shown by Dobrockey (2006) and Rahman (2006), as well as its application to education, as can be inferred from Parslow (2005). In this latter case, its implantation enables the professor to observe and revise the changes made and improvements incorporated by each of the students, and also to refine the content of the same by correcting any detected errors. So, Wiki technology is configured as a tool that enables the teacher (1) to follow the evolution of the acquisition and generation of the knowledge of the group and of each of its members and (2) to efficiently evaluate each student in terms of group and individual work done. Also, from the student's point of view, the use of this application leads to the development of teamwork skills, favouring adaptation to the business environment.

While exploiting the advantages offered by each model for the way students acquire skills and are evaluated, we shall now design and implement a WebQuest and a Wiki for the financial accountancy course taught in the first year of the Company Management and Administration Degree at the Universitat Autònoma de Barcelona (UAB). Its aim will for the students (1) to become aware of the importance of financial accountancy and annual accounts as elements of information on the transactions the company makes with its environment, within the context of corporate social responsibility, (2) to know how to interpret and evaluate the information that is provided and (3) to learn to use it to make decisions.

To optimise the aforementioned development of skills and abilities, as shown by Lim (2004), the WebQuest needs to be well designed. In this sense,

Dodge (1997) and Zheng et al (2007) indicate that the WebQuest should be structured into at least six parts: (1) introduction, (2) task, (3) sources of information, (4) description of the process, (5) evaluation of the result and (6) conclusion. However, Young and Wilson (2002) and Allan and Street (2007) propose an adaptation of the traditional WebQuest structure in which an extra level is added. In said level, each group of students presents its other colleagues with the results it obtained, generating knowledge feedback and the exchange of ideas, which will help the professor to analyse the class as a group, and also each student's attitude within the class, and to make comparisons between groups. Additionally, in our proposal we added another level that consists of incorporating a Wiki application to the WebQuest to enable us to monitor each student's individual work.

2 DESIGNING THE WEBQUEST

The aim of the WebQuest we are proposing is to generate generic skills among first year students on the Company Management and Administration degree course, which will enable them to analyse and synthesise accountancy and ethical information, put the theoretical knowledge they have acquired throughout the course into practice, acquire computer skills that will familiarise themselves with the information technologies used in the business environment, acquire skills for working autonomously and develop the social skills needed to work as a part of a team.

In order to achieve said objectives, we propose the following WebQuest titled "Do we invest in destruction or in sustainable companies?" which we structure into five parts.

2.1 Introduction

In the introduction section we present the initial problem that students have to solve. To do this, we show the context in which the students are going to work, ensuring that we present a scenario that is in keeping with the realities of the business world in order to motivate the students. So, we propose a practical exercise to the students that simulates the kind of professional work they would encounter if they were employed by a real-life consultancy office, a pension fund management company or an investment management company.

To do so, we propose the following scenario:

The manager of an investment management

company decides to increase the range of products it offers and to provide its clients with a new product that is in increasingly greater demand: a socially responsible investment fund. However, in order to manage the fund efficiently, the solicitor needs to select a combination of titles that optimise the portfolio's trinomial of profitability-risk-social responsibility.

To do so, an Ethics Commission is constituted for the fund, mainly made up of independent people that are related due to experience or proximity to the fund's principles, which include professors from the UAB's Department of Company Economy. This commission is responsible for determining the values or instruments, whose companies are adjusted to the criteria established in the aforementioned principles. From among these values, the Managing Company will select those that optimise the profitability-risk binomial of its portfolio.

Given that there is such a high number of Spanish companies that need to be evaluated, the Ethics Commission has asked the students studying Financial Accountancy as part of the Company Management and Administration and Law and the Company Management and Administration degree courses to help them make a report recommending the Spanish companies in which they could invest the monies in the fund in consideration of their business behaviour.

Are Spanish companies socially responsible?

2.2 Task

In this section, we comment on the work that the students have to present following the research proposed in our WebQuest. In this case, the idea is to make a report on corporate responsibility and an oral PowerPoint presentation to be given to their classmates. We believe it is important for the students to have prior knowledge of the final product of the WebQuest, whose content is described as follows:

"The Financial Accountancy students, in commitment to society, the environment and ethical behaviour of companies, will provide their assistance to the Ethics Commission, and will make a report that evaluates whether Spanish companies carry out their activity in an ethical manner on the basis of the criteria of social, environmental and legal responsibility, and in respect of the social rights established in the ethical principles of the funds to be provided by the managing company itself.

So, the Ethics Commission will supply us with a

directory of Spanish companies compiled by ESADE that groups companies into sectors, providing legal information in relation to their annual accounts, i.e. Balance Statement, Profits and Losses Account and Annual Report, as well as voluntary information relating to social responsibility, environmental reports and sustainability reports supplied by a large number of companies in the sector.

The students will make a group report, and will provide it in writing and present it in public before their colleagues, who will be able to ask questions and discuss the comments made. To do this, they should consult the Web, use the Wiki application to make the report, and make a PowerPoint presentation of the report."

2.3 Process

This section provides a detailed description of the preliminary steps to be followed by the students when preparing the report, and others related to the creation of the report on corporate responsibility and the presentation of the results. So, first, the work groups will be formed. In this sense, the number of students in each group needs to be determined, as well as the criteria for forming these groups.

With respect to the first issue, many academics, including Rue (2004) and Quinquer (1995) agree in saying that the perfect size of a group should be between two and four students, as this will promote discussion and the exchange of ideas without any of the members of the group taking a passive role. Given that the group to which the work is being proposed has a large number of enrolled students, groups of four will be used, which will help the professor to supervise the process.

As for the criteria for forming groups, Alfonseca et al (2006) comment that the mechanism for forming groups could influence their learning process. So, there are two possibilities: (1) let the students form their own groups, which as suggested by Johnson and Johnson (1975) would lead to the formation of homogeneous groups and (2) for the professor(s) to decide on the people who will go into each group and randomly form homogenous and/or heterogeneous groups.

Alfonseca et al (2006) go for the first option because the literature supports the hypothesis that students tend to form groups in accordance with similar characteristics and skills, which could favour the learning process. However, when students obtain their degrees and are incorporated into private companies, the chances are that the company's

employees will form a heterogeneous group in terms of skills and characteristics, which would imply the student having to integrate and adapt to the new situation if he or she wants to stay on in the job. So, to determine which work environment is most adequate, we apply each of the options to a large-group. In large-group A, the students voluntarily form groups in order to test the hypothesis made by Johnson and Johnson (1975) and Alfonseca et al (2006). In large-group B, the professors make the group classification by applying such criteria as town of origin, entrance mark, sex and age differences. The result of this experiment could be of major relevance for human resources departments when selecting employees.

After that, the details of the calendar for carrying out the project and holding meetings with the professor are drafted. Then the structure of the corporate responsibility report is specified, showing the content of each section where reference should also be made to the sources from which the data was obtained.

In this sense, the report is made up of five parts: (1) Introduction, which specifies the aim of the report and critically comments on the operative principles around which the fund's ethical principles are constructed, a link to which will be provided on the website; (2) Indicators, for which guiding values are given to make it possible to determine whether a company complies with what is established by the fund's ethical principles by taking as a reference the social, environmental and economic indicators contained in the Guide for the Creation of Sustainability Reports (GRI) to which a link is provided in the WebQuest; Also in this section and for each indicator, participants must comment on whether said information is obligatory or not and, if it is, where these regulations are given (3) Strategic map of the stakeholders, where the students should examine the information given by the company regarding its socially responsible activity and the options of the different stakeholders regarding the operative actions carried out by the company in order to determine whether it uses social corporate responsibility as a marketing strategy or whether it is a company value that is integrated in the company's mission; (4) Excluding criteria, where it is determined whether the company invests in other companies whose activity is injurious to human life, fails to respect human rights, promotes the destruction of peoples, deteriorates the environment, is damaging to public health, or does not act in accordance with ethical principles; (5) Evaluative criteria, where the student must examine whether the

company being analysed invests in companies that show socially responsible behaviour in accordance with the established ethical principles; (6) Conclusion, where the students must recommend investment or not in the analysed company and justify this verdict.

To produce the aforementioned report, the students should consult legal information, i.e. Balance Statement, Profits and Losses Account and Annual Report, along with voluntary information provided by the companies in the form of social, environmental and sustainability reports. However, companies might manipulate their reports of results and voluntary reports on corporate social responsibility in order to cover up irresponsible or illegal behaviour. To deal with this, in addition to the information provided either voluntarily or under obligation by the company, the students should also use other sources of information. In this case, we propose making a search of a base of magazines in which the students must seek out journalistic articles providing information about the company.

So, each step implies exploratory work whose objective is to construct knowledge through critical reasoning regarding the questions being asked regarding the structure of the company's accounts, economy, finance and corporate responsibility. To do this, comments are established that are designed to act as "conceptual scaffolding", which help guide the students through the execution of the project.

This section also details the way in which the report should be presented. In this sense, students are told that the report should contain no more than 20 pages, using 1.5 spacing, size 12 fonts in Times New Roman, margins of 2.5 cm and numbered pages. The first page must show the name of the company being analysed, the details of the students in the group (surnames, names and enrolment group), and the dates when the work was completed and handed in.

2.4 Evaluation

This section contains the items that are evaluated and the scores that are given to each. The idea is to evaluate the skills acquired by the student in the proposed learning process. To do this, we distinguish between skills of a transversal nature that could be applied to many other subjects but which are no less important because of that, and specific skills related to the knowledge being worked upon here.

Among transversal skills we could cite:
    a)   critical reasoning,
    b)   good communication,

c) autonomy
d) creativity.

As specific skills involving the proposed subject we have:

a) basic knowledge of the field of study
b) capacity for analysis and synthesis,
c) capacity to put knowledge into practice,
d) teamwork
e) decision making

To evaluate how students acquire skills, Baker (2008) compares different instruments showing that they are all reliable. However, said author focuses only on the joint evaluation of the group without taking into consideration the individual work done by each student within the same. Therefore, in the present work we evaluate the skills acquired by the students, assessing:

(1) the individual work done by each member of the group, which we observe by analysing the Wiki page. This enables us to evaluate the knowledge acquired by the students, their capacity for analysis and synthesis, their autonomy, their capacity to put knowledge into practice and their critical reasoning.

(2) the work done by the group, where we take into account punctuality when respecting hand-in dates, and the quality and originality of the work. This also enables us to evaluate the aforementioned skills, teamwork and decision making.

(3) the oral presentation both to the tutor and to the other participants. On the basis of the oral presentation we will evaluate the participants' communication skills both individually and as a group, as well as their capacity to adjust their presentation to a certain time and structure.

The evaluation will be marked from 1 to 4 for each of the three proposed sections.

2.5 Conclusion

After doing the task that we proposed, the students will be able to analyse and synthesize a company's the financial-economic-accountant information. The students will also be familiar with the accounting terminology, will know some databases which contain companies accounting information, will be able to put their knowledge into practice through critical thinking and will be able to coordinate themselves to work as a team and will have to skills for explaining their work in public. Besides, the students will be able to make decisions on where they could invest on the basis of companies' the corporate and social behaviour, will be able to skilfully handle the tools pertaining to the knowledge society to elaborate reports, will solve

moral dilemmas that could arise in the business environment and will get into research skills.

Finally, they will have abilities to do research on corporate social responsibility. That's the reason why we challenge them to think about important questions in accounting area: Do you think that the companies should include corporate social responsibility's information in their annual reports? How could the companies include this information?

3 PRODUCTION OF REPORT USING WIKI APPLICATION

The production of the report on corporate responsibility is made using the Wiki application, as this offers advantages through being easy to make and use, and enables the professor to control and modify the content of the same. Access to said application is made via the WebQuest, via a link in the "Process" section.

So, each work group will have one Wiki consisting of four parts: (1) project page, where the corporate responsibility report will be made following the criteria established in the fund's ethical principles, (2) discussion, a space to be used by students to introduce their comments in relation to compliance or non-compliance with the excluding and evaluative criteria, as well as what they have found in journalistic articles and judicial sentences; (3) source or edition code, which makes it possible to make modifications to the project and discussion pages and (4) history, which enables the professor to monitor the individual work done by each member of the group and observe the development of the members of the same.

Said report will then be presented in writing in accordance with the aforementioned rules for delivery.

4 CONCLUSIONS

In this study, we propose the use of two tools pertaining to the knowledge society, namely a WebQuest and Wikis, to promote innovation and progress in the knowledge university students have of the financial and social accounting of companies and their responsibility towards society. Raising student awareness of issues of corporate social responsibility seems to us to be a fundamental part of their human and ethical training, and for preparing them for their future careers. Furthermore,

the use of the WebQuest enables students to become actively involved in the learning process, acquiring skills, competences and abilities that will be of use when they complete their studies and go into employment. When the proposed activity is completed, the students will have become familiar with ways of handling the accountancy reports provided by companies, developing a sophisticated level of knowledge in the area of accountancy, generating ideas and knowledge as a result of the experience, and developing social skills and capacities as a consequence of the interaction between the members of the work group. They will also be familiarised with information technologies, which are fully integrated in the business environment they will be joining in the immediate future. This methodology also combines a web environment with other sources of knowledge beyond the traditional ones that students can use and which are also detailed in the WebQuest, which enables them to broaden their horizons and come into early contact with tools that will be of great use to them in the future.

REFERENCES

Allan, J y Street, M. (2007): The quest for deeper learning: an investigation into the impact of a Knowledge-pooling WebQuest in primary initial teacher training, British Journal of Educational Technology, 38, 6, 1102-1112.

Afonseca, E.; Carro, R.M.; Martín, E.; Ortigosa, A. y Paredes, P. (2006): The impact of learning styles on student grouping for collaborative learning: a case study. User Modeling and User-Adapted Interaction, 16, 3-4, 377-401.

Baker, D.F. (2008): Peer Assessment in Small Groups: A Comparison of Methods. Journal of Management Education, 32, 2, 183-209.

Biggs, J. (2003): Teaching for quality learning at university (2nd ed.). Buckingham, UK: The Society for Research into Higher Education and Open University Press.

Dobrockey, L.P. (2006): Hacia la library 2.0: blogs, rss y wikis. El profesional de la información, 16, 2, 138-142.

Dodge; B. (1995): WebQuests: a technique for Internet-based learning. Distance Educator, 1, 10-13.

Dodge, B. (1997): Some thoughts about WebQuests. Retreived 20 June 2008, from http://webquest.sdsu.edu/about_webquests.html.

Dodge, B. (2001): Focus: five rules for writing a great WebQuest. Learning and Leading with Technology, 28, 6-9.

Donovan, O.M. (2005): The Carbohydrate Quandary: Achieving Health Literacy Through an Interdisciplinary WebQuest. Journal of School Health, 75, 9, 359-362.

Harrer, A.; McLaren, B.M.; Walker, E.; Bollen, L. y Sewall, J. (2006): Creating cognitive tutors for collaborative learning: steps toward realization. User Modeling and User-Adapted Interaction, 16, 3-4, 175-209.

Johnson, D.W. and Johnson, R.P. (1975): Learning Together: Group Theory and Group Skills. Pearson Education.

Johnson, D.W. and Johnson, R.T. (1990): Cooperative learning and achievement. In: S. Sharan (ed.) Cooperative Learning: Theory and Research, Praeger, New York.

Kanuka, H.; Rourke, L. y Laflamme, E. (2007): The influence of instructional methods on the quality of online discussion. British Journal of Educational Technology, 38, 2, 260-271.

Lim, B.R. (2004): Challenges and issues in designing inquiry on the web. British Journal of Educational Technology, 35, 5, 627-643.

Long, J.D. y Stevens, K.R. (2004): Using Technology to promote sefl-Efficacy for Healthy Eating in Adolescents. Journal of Nursing Scholarship, 36, 2, 134-139.

Parslow, G.R. (2005): Multimedia in Biochemestry and Molecular Biology Education. Commentary: Wiki: The Fast Way to Collaborative Authoring, 33, 5, 371.

Quinquer, D. (1995): El treball cooperatiu en ciències socials, una estratègia pera la gestió social de l'aula», L'Avenç, 189: 71-72.

Rahman, M. (2006): Wiki Technology as a "Free" collaborative tool within an organizational setting. Information Systems Management, 23, 4, 59-66.

Richards, C. (2005): The design of effective ICT-supported learning activities: exemplary models, changing requirements, and new possibilities. Language, Learning and Technology, 9, 1, 60-79.

Rué, J. (2004): El desenvolupament d'unitats de programació mitjançant l'organització cooperativa del treball dels alumnes. Bellaterra: UAB-IDES.

Sautter, E.T.; Pratt, E.R. y Shanahan, K.J. (2000): The Marketing WebQuest: An Internet Based Experimental Learning Tool. Marketing Education Review, 10, 1, 47-55.

Slavin, R.E. (1992): When and why does cooperative learning increase achievement? Theoretical and empirical perspectives. In: Hertz-Lazarowitz, R., Miller, N. (eds.) Interaction in cooperative groups: The theoretical anatomy of group learning, pp. 145–173. Cambridge University Press, New York.

Young, D. and Wilson, B. (2002): WebQuest for reflection and conceptual change: variations on a popular model for guided inquiry. World Conference on Educational Multimedia, Hypermedia and Telecommunications, 2002, 1, 2116-2121.

Zheng, R; Perez, J; Williamson, J. y Flygare, J. (2007): WebQuests as perceived by teachers: implications for online teaching and learning. Journal of Computer Assisted Learning, OnlineEarly Articles.