

STUDY REGARDING THE UTILITY CONCEPT MAPS ON DETECTION BY THE STUDENTS OF THE PRESENCE AND ETHICAL NOTIONS INTENSITY IN ACCOUNTING ACTIVITY

Diana Elisabeta Matica, Dana Simona Gherai

Finance and Accounting Department, Faculty of Economics, University of Oradea, Oradea, România

dianabalaciu@yahoo.com

dana.gherai@yahoo.com

Abstract: This study aims to investigate how students prioritize the role of ethics in their future professional activity. The results of such a study may allow a better analysis of the factors involved in the quality of the accounting profession. To achieve the objective, it was used a tool of graphical representation of knowledge that fosters creative thinking and that guarantee a minimum reduction of the researchers influence: conceptual maps. Using conceptual maps to implement this concept as a method applied in an educational establishment, with specific accounting, is a new idea, a hypothesis that has proven its efficiency and sustainability in our research approach. The conceptual maps is a versatile method, that creates an added value, which can be used in different ways in accounting courses, both in teaching and in assimilation. The sample consists of 30 master degree of specialization ABMA (Accounting, Business Management and Audit) from the Faculty of Economics, University of Oradea. Each student was asked to develop a conceptual map, by which to sketch the skills and the type of behavior they consider that they must have a professional accountant in preparing the financial statements of an entity.

The requirement was designed to not refer directly to the word "ethics" in order not to induce students prejudices when formulating their response. Conceptual maps developed by students were analyzed in terms of architecture and content, to identify the importance of the ethical dimension in the accounting profession, the presence of the concept of responsibility and impact of gender on the intensity of these concepts. Our approach emphasizes an innovative approach to research local and international accounting. This approach suggests that the use of conceptual maps on the one hand, improve what students learn and on the other hand, develops higher order skills qualifications required by the accounting profession.

Keywords: Ethics, Conceptual maps, accounting education, gender, self-learning, skill competencies

JEL classification: M41, I24

1. Introduction

The objective of this study is to analyze the measure to which the students prioritizes the role of ethics in their future professional activity. To achieve the objective it has been used a tool of graphical representation of knowledge that

fosters creative thinking and which guarantee a reduction to minimum influence of the researcher: conceptual maps.

Conclusions regarding the trend of ethical relativism in the accounting drawn from studies conducted by Cernușca and Balaciu (2014) led us to interrogate ourselves about the teaching sources that contribute to such provision for ethics versatility. Overall noticing the teaching tools, we found that a certain improvement can be brought by using conceptual maps, method originally used in other areas, but which has proved effective learning.

The paper of Turns et al (2000) presents background on concept maps and describes uses of concept maps at both the course and program level.

In our country, Feleagă N. and Feleagă L. (2013) examined the relationship between gender and perception of ethics among audit employees. The sample consists of 10 Romanian auditors, operating in one of the Bigcabinets. Results demonstrated that men and women have different perspectives regarding how to define the ethics and the importance given to it in everyday life. These are but complementary perspectives, and audit firms can rely on the mixed nature of the teams to create a balance in terms of the degree of relationship and trust, both inside the cabinet and in the relationship with customers. A similar approach is continued by Balaciu D.E. (2015) in a paper that provides a model for using conceptual maps in accounting courses. This approach suggests that the use of conceptual maps on the one hand, improves what students learn and on the other hand, is developing higher order skills qualifications required by the accounting profession. This is the context in which it occurs this study.

2. Methodological aspects

Our sample consists of 30 master degree students from ABMA (Accounting, Business Management and Audit) specialization within the Faculty Of Economic Sciences from University of Oradea.

The number of women involved in accounting significantly increased from year to year, currently representing more than half of the workforce in this profession (Ortiz-Walters, 2012). In Romania, three quarters of all employees in accounting and audit are women (Istrate, 2009). For this reason, women are prevalent in our sample.

Profile of detained students for study is presented in Table 1.

Table 1. Sample structure

Information	Number of persons
MA first year/Second year MA	18/12
Girls/Boys	21/9

Source: Own elaboration according to processed data

Each student was asked to develop a conceptual map by which to sketch *skills and the type of behavior they consider that a professional accountant must have in preparing process of financial statements of an entity*.

The requirement was designed not to refer directly to the word "ethics" in order not to induce students prejudgments when formulating their response.

For the good development of approach, students were explained the notion of conceptual map and it has been presented a model of simple conceptual map (Figure 1) that breaks down the initial requirement on three components: Who elaborates the financial statements?; What are the financial statements?; and Whom they are useful?

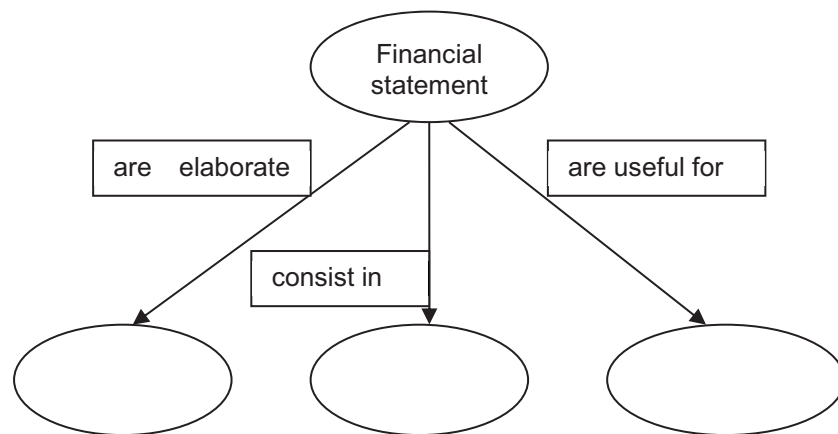


Figure 1. Conceptual map model presented to the respondents

Source: own elaboration

Students worked individually for elaborating the map. They had not the opportunity to interact with each other and they were not influenced by researchers, they only had a minimum methodological technical assistance. Although, in the last decades, a lot of computer tools came out for creating conceptual maps, (Reader & Hammond, 1994; Kim & Olaciregui, 2008; Liu, Chen Chang, 2010; Shin et al. 2000; Wu 2011), from material organization reasons, in this study, the maps were manually elaborated.

3. Result analysis

Conceptual maps developed by 30 students were analyzed in terms of architecture and content, to identify the importance of the ethical dimension in the accounting profession, the presence of the concept of responsibility and impact of gender on the intensity of these concepts.

The first step was to analyze the architecture of conceptual maps to determine whether there is a correlation between the graphical sophistication maps and the professional education of students. The results are presented in Table 2 and confirm the hypothesis that the professional education plays an essential role in complexity representations students.

Thus, while most maps developed by MA first year have simple structure (usually linear), maps made by second year MA are more sophisticated.

Table 2. Conceptual maps form according to experience and MA gender

Map type	Map numbers n = 30	MA first year n = 18	Second year MA n = 12	Students girls n = 21	Students boys n = 9
Simple	15	15	0	10	5
Complex	15	3	12	11	4

Source: Own elaboration according to processed data

Further, conceptual maps were assessed by calculating the number of concepts of ethics, the number of links referring to ethics and also the relationship between the number of links referring to ethics and number concepts referring to ethics.

The analysis showed that all maps contain concepts related to ethics and links related to ethics. It was noticed however that there is a direct link between the level of training of masters and representation of ethics. Thus, while most of the MA first year relate ethics to compliance, second year MA rather consider ethics being a quality stemming from personality accountant, referring both to ethics in accounting and his character traits.

To test whether gender represents a criterion to explain certain differences in the importance given to notions of ethics and responsibility, data collection was done separately for girls, second year MA (Table 3) and for boys, second year MA (Table 4).

Table 3. Analysis of components of the conceptual maps elaborated by girls

Information	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11
Number of concepts related to ethics	8	7	5	9	11	7	6	8	10	9	8
Number of links related to ethics	25	20	17	20	22	23	21	19	25	13	18
Relationship between links and concepts	3,1	2,8	3,4	2,2	2	3,2	3,5	2,3	2,5	1,4	3

Source: Own elaboration according to processed data

Table 4. Analysis of components of the conceptual maps elaborated by boys

Information	B1	B2	B3	B4
Number of concepts related to ethics	9	8	9	8
Number of links related to ethics	17	10	29	18
Relationship between links and concepts	1,9	1,3	3,2	2,2

Source: Own elaboration according to processed data

Analysis of concepts used by MA girls and boys shows that elements such as, responsibility, ethics, morality, honesty are used evenly, both boys and girls (Table

5). However we notice girls have given more importance to networking and assertiveness in elaborating financial statements. We consider relevant the fact that they mentioned personal qualities such as professionalism, politeness, discretion, qualities as crucial in preparing the financial statements. The boys examined instead ethical behavior rather in terms of compliance with accounting principles mentioning concepts such creativity, realism, credibility.

Table 5. Concepts categorized by gender

Concepts only used by girls	Concepts only used by boys	Concepts used both by girls and boys	
Politeness	Conduct rules	Honesty	Seriousness
Confidentiality	Integrity	Ethics	Accounting rules
Objectivity	Legality	Responsibility	Accounting principles
Networking	Stringency	Independence	Credibility
Sociability	Pragmatism	Experience	Competence
Assertiveness		Accounting deontology	Rightness
Professionalism		Professional rationality	Sincerity
		Morality	Economic reality
		Creativity	Compliance
		Legality	Adaptability

Source: Own elaboration according to information gathered from conceptual maps elaborated by students

The results show the boys and girls have different perspectives regarding the way of defining ethics and the importance of ethics in daily activity, these perspectives being although complementary.

Therewith this study reveals the efficiency of using conceptual maps for a better understanding of professional representations and ethics of the students. Also, the analysis of collected conceptual maps showed differences related to the way students, girls and boys, perceive their future profession. While girls seem to give a higher importance to promoting a pleasant work environment, focused on mutual trust within the team, boys are more attached to respecting the rules, norms and procedures. The study also proves the conceptual maps could be useful to managers to measure the ethic sensibility of their employees, including the accountants. Each accountant has to cope with some choices during their career and this thing represents a character test regarding the future choice. The choice itself can be a function of the individual's ethical own past influenced by a number of factors. Therefore, we consider convenient to interview, for hiring such a post, and not only, to rely on this tool to consider at least the ethical profile.

Conclusion

The analysis of conceptual maps on ethics creative accounting has allowed registration of representations that students form about economic issues. The

differences in approach of the maps depend on several factors: frequented academic courses, personal experience, mass media influence, specialized media, economic analysis shows on TV, personal readings etc.

Practical experience with students revealed that conceptual map, using the visually-representative schematic and relational interconnection between used key concepts, significantly improves the theoretical approach of a topic. This approach serves to make the students feel comfortable students to use elements and schematic conceptual drawing of a map, before delving deeper into more complex topics related to accounting. But conceptual maps allow questioning its perceptions by introducing a hierarchical way of organization information on ethics in accounting, subject which seems not to be so obvious in the Romanian economic education. Their approach in terms of academic accounting education has enabled us to conclude that this method is suitable for teaching and learning in this area. *The "pilot" study* results whose objective was to analyze, through conceptual maps, how students prioritizes the role of ethics in their future professional activity, confirms the hypothesis that the professional education plays an essential role in complexity representations students. Thus, while most maps developed by MA first year have simple structure (usually linear), maps made by second year MA are more sophisticated. In this study we have achieved not only a diagnostic of the academic and economic professional environment, but we used conceptual maps as model for the concept mapping as a method of teaching/learning in accounting. As we set at the beginning of the study, our approach emphasizes an innovative approach for local and international accounting research. This approach suggests that the use of conceptual maps on one hand improve what students learn and on the other hand develops higher order skills qualifications required by the accounting profession.

The transfer of European models in Romanian academic practice is new and marks an opening. The study of conceptual maps revealed there are also some obstacles: teachers from accounting field do not have enough experience and enough empirical data or published studies on this topic. This lack of experience is due to the long time that has to be allocated to the skill of this methodology, the effort to teach students how to build their own conceptual maps, and the complex process of integrating this technique in teaching courses.

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