ALL IN THE SAME BOAT: COLLABORATIVE EMERGENCE IN HIGHER EDUCATION FRAMEWORKS

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Abstract.

Higher Education frameworks provide students the elements which will be the basis of a successful professional career in any field of knowledge. In terms of transmission of knowledge, there has been a great advancement and adaptation to 21st century learners. However, there is still a lack of in-depth study regarding the development of student’s competencies in terms of inter-personal and intra-personal skills. The present study assesses the introduction of specific collaborative activities in undergraduate students that promote the development of emotional intelligence and specific competencies which are essential for team-work. The results show how collaborative emergence rises in groups of students that face a task requiring autonomous knowledge-acquisition, lacks specific rules in terms of how to carry out but establishes a specific goal to be reached. This has been viewed by learners as a key element that helps them improve in specific inter-personal and intra-personal skills that they would otherwise not develop in a traditional higher education classroom setting.

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1. INTRODUCTION

Throughout the past few decades, the most relevant topics in the field of education have been promoting effective learning activities and motivating students, in order to ensure student’s knowledge-acquisition. This implies not only understanding how learning process is conducted, but also whether all students learn in the same way and through the same activities. During late 20th century, two types of learners were established: ‘academic’ and ‘non-academic’ (Biggs, 1999). The first ones were considered to have an internal motivation to learn meanwhile the second group consists of students who do not have an intrinsic motivation and need an external incentive to learn. It has not been found a single classroom with only one type of learners; hence teachers should consider they will always have both, academic and non-academic students, when they plan their syllabus, classes, activities and assessment. Additionally, it is essential for professors to accurately identify each student type among the learners in a classroom to effectively motivate them.
In order to be able to motivate academic and non-academic students, it is essential to count on a large range of activities that ensure knowledge transmission, together with accurate assessment. The International Centre for Leadership in Education (ICLE) has analysed the relationship between the knowledge transmission and assessment and the activities through which this is conducted. As a result, ICLE established four main areas: a) knowledge acquisition, b) knowledge assimilation, c) knowledge application and d) knowledge adaptation.

Considering the different types of learners and the diverse areas or stages of knowledge, through a combination of theoretical and practical activities, it is easier for non-academic students to comprehend the theory. Additionally, it is deemed essential for teachers to act as coaches with their students, helping them in the discovery of knowledge, so that students foster their self-learning. In this context, experiencing real-life situations (experiential-learning) becomes a key element in developing student’s competencies to help them learn how to act in their professional lives. What is more, this could be a great way to enhance knowledge-acquisition (Kolb and Fry, 1975).

Specifically, activities that allow students to experience real-life situations are good tools to align learning outcomes with learning objectives, teaching and assessment. Moreover, learners not only learn how to deal with similar situations in the future, derived from their own experiences, but they can also extrapolate this knowledge and adapt it to other situations when applicable.

In the specific case of Social Science students, it is of great importance the development of emotional intelligence, as their future professional lives will require these characteristics. According to Goleman (2001), the main socio-emotional characteristics can be divided in personal competencies and social competencies, depending on whether they are inter-personal or intra-personal. Through an in-depth analysis comparing students from different degrees and profiles, Sanchez-Ruiz et al. (2010) found out that learners pursuing degrees in Social Sciences have higher emotionally intelligence levels compared to their peers in other knowledge-areas. However, it has still not been determined how professors should plan classes and activities accordingly, nor how they can effectively motivate students with these characteristics. If there was further knowledge in this area, teachers could enhance their learner’s levels of emotional intelligence and help people in their class to achieve a key competence for their future career developments.

Based on the existing literature gap, we herein propose a new collaborative activity: the Videocast Project, in order to foster specific emotional intelligence competencies and student’s motivation. This activity consists of learners in fields of Social Sciences forming groups and implementing a new technological tool with which they have no prior experience, with which they need to carry out an activity (role play), similar to a real life situation they would face in their professional lives. This represents a challenge for students, which results in their self-development of self-learning and motivation skills, while contributing to the improvement of their emotional intelligence competencies. The herein proposed research conducts a literary review in the first section, followed by a description of the methodology. Subsequently, a discussion based on the experiences of students from its application is presented, together with conclusions and future lines of research.
2. LITERATURE REVIEW

2.1. Academic orientation of students and learning-related activities

Academic orientation of learners has been a topic thoroughly studied, especially since the early 20th century. Scholars have concluded that there are diverse teaching approaches to tackle each type of students (there are divergences as to in which way each learner acquires knowledge) and analysed which activities could boost the learning process (Kolb and Fry, 1975; Tennant, 1997; Biggs 1999; Biggs, 2006). Prior to the assessment of learner’s knowledge-acquisition process, the vast majority of teachers focused on what they were doing instead of what was taught or the knowledge truly acquired by students (Marton and Booth, 1997). However, during the past decades, student’s activities were found to be of higher importance compared to what the teacher does, in terms of achieving learning objectives (Shuell, 1986).

During late 20th century, Biggs (1999) focused on a learner’s commitment and motivation to increase its knowledge in relation with the activities teachers used for that objective. On the one hand, through this study, the author evidenced that some students, herein referred to as ‘academic students’, are internally motivated to learn. This implied that these learners do not need specific activities to be motivated and interested, as their inner nature drives them to desire acquiring higher knowledge. On the other hand, Biggs (1999) concluded other students need an external incentive in order to be interested in learning. Hence, for this last type of learners, the author established there is a need for teachers to challenge students with activities that call for active participation. While these activities are an excellent external driver for non-academic student, and it boosts their motivation, it also proves to be a positive motivation enhancer for academic students. Consequently, student’s motivation relies on good teaching practices, which implies how the teacher plans its lectures and activities.

Among the things that are included in ‘good teaching practices’, it is essential to denote curriculum, methods of teaching/assessing, student-related factors, such as ability or inner motivation (Biggs, 2006). Additionally, professors can also contribute to the development of learner’s inner motivation, taking into account concepts such as self-efficacy. This last idea, undestood by Bandura (1994) as way in which people think, feel, behave and self-motivate, is another factor applicable to both agents in the learning process (i.e. teachers and students). Furthermore, student’s ideosyncracies and their social situations can also affect self-efficacy (Cervone, 2000), reason why it is important to establish a homogeneous situation for students inside the classroom. This shall prevent these factors from affecting a learner’s self-esteem, self-efficacy or perception of possible achievements.

Students should visualize ability as a skill that can be acquired (rather than being born with), having a high level of perceived self-efficacy, could better analyze and solve their problem. On the contrary, a feeling of low self-efficacy leads to self-doubt and preocupation, leading to self-believing that their efforts will be in vain and they will not succeed in knowledge-acquisition (Bandura, 1989).

2.2. Experiential Learning and Self-regulated Learning

As it was previously established, there are specific activities/techniques that can contribute to the enhancement of the learning process for both, academic and non-academic learners. One of these techniques is learning through experience, which not only ensures knowledge-acquisition, but also constitutes an excellent tool to align
learning objectives, teaching, assessment and learning outcome (Kolb and Fry, 1975). Furthermore, the learning process is consolidated once students can actively implement knowledge, that is, incorporating experiencing and understanding the effects of their own actions. Through this practice, students are prepared for real-life situations while understanding the consequences of theoretical concept’s practical implementations.

In order to understand how the experiential learning shall be implemented, the International Centre for Leadership in Education (ICLE) established a link between the knowledge transmission, its assessment and the activities through which this is conducted. The ICLE defined there are four stages of the learning process until the final learning objective is achieved, which are: knowledge acquisition, knowledge assimilation, knowledge application and knowledge adaptation. Along these lines, the learning process starts with understanding theoretical concepts and its key concepts (i.e. the first two stages). After students know the theory, during the last two stages, they learn how this knowledge can be applied and in which situations, whether in the same discipline or in others. However, it is essential to have an active participation from the professor throughout the activity to coach students and help them through a passive role.

Apart from the herein described stages of the learning process, it is essential for students to develop self-interest and self-motivation in knowledge-acquisition. Self-regulated learning is the ultimate expression of self-interest and self-motivation of a learner in acquiring knowledge, which implies the optimum combination of drive, enthusiasm, concern and achievement of learning objectives. Several scholars in education and psychology fields have devoted their attention to this matter. Specifically, Paris and Byrnes (1989) defined self-regulated learners as students who are looking for challenges and to overcome obstacles by being persistent and implementing creative problem-solving techniques. These type of learners set realistic goals and employ a wide range of resources to solve problems through innovative approaches, having higher intrinsic motivation, sense of goal-orientation and tend to have positive expectations. Because of these characteristics, these students have a tendency to approach any kind of academic task with confidence and purpose.

While it is widely accepted that education shall provide individuals with the tools to carry out activities in their fields, considering technical, theoretical and practical knowledge, it has only been in recent years that it was also evidenced that education should contribute to student-personality development. Hence, the learning process and learning activities shifted for a more student-centred perspective (Collins, et al., 1989; Boekaerts, 1995; Rozendaal, et al., 2005). In doing so, the learning process starts with student’s self-conception of their knowledge prior to a specific class, course or degree and how it increases through the learning-process. This implies not only rising the level of information and abilities acquired but also their perception of their own knowledge (Valle, et al., 2003).

2.3. Emotional Intelligence Competencies

In the specific case of Social Science students, it is of great importance the development of emotional intelligence, as their future professional lives will require these characteristics. Along these lines, Goleman et al. (2001) determined that emotional intelligence is the core factor that drives a person’s performance in the workplace, being the key element to succeed in a professional environment. Furthermore, the authors identified the main socio-emotional characteristics, which can be divided in personal
competencies and social competencies, depending on whether they are related to interpersonal or intra-personal conditions. Hence, as personal elements, Goleman et al. (2001) include emotional self-awareness, accurate self-assessment, self-confidence, emotional self-control, trustworthiness, conscientiousness, adaptability, achievement, drive to succeed, and initiative. With respect to social competencies, these encompass empathy, service orientation, organizational awareness, developing others, inspirational leadership, influencing others, building bonds, teamwork and collaboration. Emotional Intelligence is a quality every student in fields of social sciences should have in order to succeed in their professional lives. Sanchez-Ruiz et al. (2010) assessed personalities and traits of emotional intelligence in learners from different fields of knowledge. In the case of social sciences, the authors prove these students have higher emotionality when compared to peers studying technical fields. This implies that in general terms students who pursue degrees in the fields of social sciences already have a tendency to have higher coefficients of emotional intelligence than other learners. Hence, Sanchez-Ruiz et al. (2010) conclude having comparatively higher emotionally intelligent students sets a basis for professors to plan classes and activities accordingly, while getting more information regarding which factors can motivate their students.

Considering the aforementioned importance of academic orientation, self-learning, motivation and emotional intelligence competencies, specifically for students in fields of social sciences, there is still a lack of in-depth analysis as to which activities and assessment can be used in order to help students in the development of these skills. Based on the abovementioned gap, the present study proposes new tools that directly tackle the training of these competencies and develops appropriate reinforcements and effective modes of training. Through collaborative tasks and group work both academic students and non-academic students can develop their emotional intelligence competencies.

3. METHODOLOGY AND DATA COLLECTION

Innovation Management students at the Universidad Europea de Madrid (UEM), who are are pursuing degrees in the areas of Social Sciences, namely Business Management, Marketing, Finance and Economics, were requested to carry out the development of a specific software application for smartphones. The objective of this project consisted in students being able to develop apps that will be useful for firms in terms of marketing, internal organization, protection of data, providing new services, etc. Each group had to create their own solution, and there was no competition between them, which implies that they could all achieve the highest possible score.

At Universidad Europea de Madrid, each degree has specified competencies that professors shall foster in their students, while each course has also specific competencies to be developed in students. In the case of students pursuing the abovementioned degrees, these general competencies are: team work, achievement, adaptability and managing change, drive to succeed, initiative and entrepreneurship. Considering their fields of study, their knowledge related to software development is scarce. Therefore, team work and cooperation were essential, based on a self-assessment of their prior-knowledge and their self-motivation to learn how to use new techniques and elements.

Additionally, Innovation Management course is expected to develop some specific competencies, which are: learn how to use and interpret technical and informatics tools in order to effectively and efficiently manage a firm, identifying and applying new
tendencies in business management, inspirational leadership, knowledge and innovation management, together with understanding the importance of research and development, as well as innovation, to achieve a firm’s competitive development in globalized markets. Based on the skills that are already being developed in students at UEM, it was considered optimal to assess through this study, whether the proposed activity could promote the development of complementary competencies, based on Goleman et al. (2001)’ classification. Specifically, the aspects of emotional intelligence evaluated were: accurate self-assessment, self-confidence, emotional self-awareness and self-control, trustworthiness, empathy, developing others, influencing others, building bonds and collaboration.

For the purpose of the present study, interaction analysis was chosen as the method for analysis. This methodology consists in studying the interaction of people with each other and with objects in their environment. In the case of the particular study, the professor studied the interaction of students within their own group for the project as well as with people from other groups, together with their use of technology for their project. Furthermore, interaction analysis focuses on people’s observable actions, which includes non-verbal gestures, how they talk and their choice of words, their movements and use of objects (technology). The objective is to identify patterns in individual and collective behavior, processing the results in terms of the development of emotional intelligence competencies, both inter-personal and intra-personal.

Taking into consideration that the methodology herein chosen is intrinsically empirical, as with other theories of knowledge and action there is grounded particular empirical evidence, which was the video recording of activities. Students worked in groups and were monitored by instructors, and provided the lack of restrictions in terms of how to carry out the project; this gave way to student’s creativity, together with the development of emotional intelligence.

4. RESULTS

During the third semester of the academic year 2012/2013 students from Innovation Management course were evaluated in their attitudes when performing group projects. With a total of 25 students coming from a variety of nationalities (Spain, England, France, Colombia, Mexico, Israel, Turkey and India), the course started with several assignments that should be conducted in pairs, groups of three or four. After getting to know each other, students created their groups for the final project and spent several sessions working in class, as well as devoting their time at home. The first element that was evidenced was the openness of students and trustworthiness to meet with people from other countries and cultures, in many cases radically different to their own.

As they started the project, they encountered the first problem: the assignment consisted in using a new technology with which none of the students in any group had previously used. As a solution, in each team one of the members who considered he/she has technological skills and capable to deal with this challenge and autonomously determined he/she would be the one who took over this specific task. The remaining members of the team collaborated in other areas, whether writing the report, contributing to the edition of the video or creating the script, etc. Therefore, the second main element that students showed was self-assessment, self-confidence, collaboration and empathy, as they each realized which was the best way they could contribute to the team without forcing a fellow teammate to deal with an activity for which they had little skills.
While carrying out the project, students encountered several problems, not being able to use the technological tool or specific technical problems to put into practice their ideas. This called for the development of their emotional self-awareness and self-control, in order to understand their inner frustrations without letting this emotion affect their performance. In several cases, members of one group asked for help to students from other teams, who gladly helped them with their issues. This promoted many other learners to reach out to fellow classmates independently of the project team in which they were. This showed they achieved collaboration not only between the members of a specific team but also with the remaining students in the class. Additionally, they were able to build bonds and developing others. What is more, the first three students that started collaborations across teams became an influence for other groups to also collaborate.

5. CONCLUSIONS

Throughout the 20th and 21st century, scholars in fields of education, psychology, pedagogy, as well as people devoted to education, have devoted large resources in research related to understanding how the learning process can be improved. Particularly, the study of emotional intelligence provided new insights, and it was understood that education goes beyond technical elements and should also focus on the development of competencies in students that can enable them to be successful in their professional lives.

Through the proposed experience, it was evidenced that by working in groups with a challenging activity that was previously unknown to students, the results accomplished by students were of a higher quality compared to other experiences. This was achieved through the development of emotional intelligence competencies, which complement the skills that were already being developed in the course. Additionally, the degree to which students develop their self-learning and self-motivation was also increased. By promoting free-range creativity and fostering the development of emotional intelligence, a highly positive and collaborative work environment was achieved. This contributes to the preparation for student’s development in the workplace after they graduate as they will have to work collaboratively with peers.

In sum, the use of an activity that challenges students and allows them to freely create their solutions to the problem, this promotes an environment for each of the learner’s personal growth. With respect to inter-personal competencies, it allows students to be more aware of their own capabilities, strengths and weaknesses, and how by trusting the people with who they work and combining their strengths with their peers’ they can achieve high results. Considering inter-personal skills, it contributes to high degrees of collaboration and teamwork, building bonds between teammates and it contributes to developing students’ competencies related to effective collaborations and their awareness in the importance of teamwork.

However, this project was only applied in courses related to Business Management. Therefore, it would be interesting to conduct a videocasting experience in other knowledge-areas related to Social Science fields, such as Law or International Relations, in order to test the interdisciplinary character of this activity. Then, we propose application of the videocast in new areas a further research line and test whether the development of emotional intelligence competencies through this activity is similar in other areas.
REFERENCES