

STUDENTS' PERCEPTIONS ON SKILLS NEEDED FOR THE FINAL-YEAR PROJECT

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Abstract

One of the main novelties of the European Higher Education System (EHES) within the Spanish educational system is that all students need to elaborate a final-year project in order to obtain the degree title. This new academic task is orientated at assessing specific and transversal degree abilities and requires the students to master different skills. The aim of this study was to analyze the perception of a group of final year undergraduate students from University of Granada regarding their level of mastery in different skills needed for the final-year project. The sample comprised 91 students aged 20 to 31 years old ($M=22.49$, $SD=1.97$) who were enrolled in the fourth year of different degrees from University of Granada. Results show that the majority of the participants consider themselves skillful in writing academic texts, in planning for their final-year project and in referencing the cited literature according to the referencing style in their degrees. However, a relevant percentage of the participants (41.8%) stated they only dominate searching for information in Spanish to a little extent and almost the majority of the participants (74.8%) considered they have very little skill or no skill at all in searching for information in English. Furthermore, more than half of the participants consider they have very little skill (41.8%) or no skill at all (15.4%) in understanding academic texts that are written in English. Also a considerable percentage of the participants (43%) consider they have very little skill or have no skill at all in making oral presentations. Finally, the majority of the participants (92.3%) consider they are not skillful or have very little skill in using reference manager software. Final year students who prepare the final-year project need to receive more training and support so they can feel confident in their ability to search for information both in Spanish and in English, to better understand English written academic texts, using reference manager software and in making oral presentations.

Keywords: students' perceptions, basic academic skills, final-year project

1 INTRODUCTION

The implementation of the European Credits Transfer System (ECTS) in the higher education system has produced several adaptations; one of them is the change of the focus in the teaching-learning process from the lecturers to the students. Within this new system students play the leading role as a result of the increased number of autonomous learning activities such as working in small groups or attending tuitions. Thus, the activities students have to perform require them to be autonomous and to be able to regulate themselves when dealing with academic challenges [1]. In this way, students need to be provided with opportunities to develop these skills. The final-year project, or the undergraduate dissertation, is one of these opportunities in which students have to develop several skills such as databases information searching, using referencing style, using English for academic purposes, writing academic texts, using software for editing documents and for presentations, making oral presentations and planning skills. This paper aims to contribute to our knowledge and understanding of the skills needed to successfully complete the final-year project through an online survey of the students' perceptions on the skills needed for the preparation of it. In the following sections we briefly describe the characteristics of the final-year project, the changes in the Spanish higher education context that have led to the need of making the final-year project a compulsory requirement for obtaining the degree title and also the skills the students need to develop in order to be successful with their final year-project.

1.1 The Final-year project

The undergraduate final-year project is, generally, an individual or sometimes a small group academic task that involves a small-scale laboratory/field-based, computer-based or survey-based research project that aims at studying into depth a specific subject [2], [3], [4]. The final-year project is essentially a piece of work that has a strong research component and requires mentoring and tuition [3]. The subject of the final-year project is chosen by the undergraduate students; however the subject is commonly related to the research interests of the supervising tutor [2], [3]. The undergraduate students also have to decide the approach and orientation of the final-year project [3].

The undergraduate final-year project is an educational tool that is aimed at assessing students' level of skill with specific and transversal degree abilities and at distinguishing between '*honours*' and '*non-honours*' students [4], [5] [6], [7]. Also the final-year project allows determining how well students understand the content of their degree and prepares them for postgraduate studies, thus it represents a valuable learning mean, a useful assessment instrument and an effective educational tool that can promote students '*self-directed*' independent learning [5], [8], [3].

In the Spanish higher education system final-year projects were a compulsory requirement only in technical degrees such as architecture or engineering before the implementation of the ECTS [9], [10]. However after the implementation of the ECTS, a new law was passed, the Real Decreto 1393/2007 [11], that stipulates that, in order to obtain the degree title, it is compulsory to elaborate a final-year project in all university degrees [6], [11]. Thus, all universities have had to establish norms about how to elaborate, present and evaluate final-year projects. At the University of Granada, where this study was carried out, students have different final-year projects options to choose from such as case studies, experimental studies, professional reports, clinical guides, reports developed from the external professional practice and artistic work. In order to be able to enroll for the final-year project at University of Granada, it is necessary to have passed sixty per cent of the total number of credits that constitute the degree and to have passed first year and basic disciplines for the degree [7].

In the Speech and Language Therapy, Psychology and Teacher of Childhood Education degrees, the final-year project started in 2013-2014 academic year. Therefore the final-years project is a novelty for the majority of university degrees and the experience with this academic task is still very limited. As research on this topic in social sciences is still sparse [12], there are many aspects that need further understanding. One of the issues that need to be clearly understood is the skills students need to be able to master in order to be successful with the final-year project. These skills are presented in the following section.

1.2 Skills needed for the elaboration of the final-year project

While accomplishing the final-year project the undergraduate students have to work over a long period of time [2] and need to use different competencies. In particular, it is expected that students are able to master research conducting related skills such as identifying sources of information, formulating research problems and designing studies, solving problems in the context of the study, collecting and interpreting data, providing multiple interpretations of data, communicating results and general skills such as time management, adapting to an unfamiliar environment and making realistic assessment of their own performance [2], [3]. All these are challenging activities that students need to be able to combine in order to compete the complex task of the final-year project.

A study on the learning outcomes of final-year projects [2] showed that students develop these skills as a result of accomplishing the final-year project, however before starting to work on the final-year project students should master at some level many of the different tasks that the project entails. Thus it is expected that they have acquired the above mentioned abilities throughout their degree studies [6]. But are really undergraduate students proficient in performing the task needed for completing the final-year project before starting to work on their final year-project?

Previous studies have shown that despite the fact that in earlier degree courses course-work assessed skills such as referencing, writing or information seeking, students do necessarily master these skills and they might even have mis-conceptions about issues such as where to search for information [8], [13], [14]. Previous experience that students have with all these skills is very relevant,

however there are other aspects that need to be contemplated, for example the perceptions that students have about the level of ability they have.

Undergraduate students' previous experience and their beliefs regarding the skills needed to achieve the goals, together with other factors such as the level of trust that students establish with their final-year project tutor, are vital for their level of autonomy [15]. Hence it is important to assess students' skills and their perceptions on the skills need for accomplishing the final-year project before starting to work on this academic task.

1.3 Aims

The aim of this study was to analyze the perception of a group of final year undergraduate students from University of Granada regarding their level of mastery in different skills needed for the final-year project.

2 METHODOLOGY

2.1 Participants

The sample comprised 91 students (79 women and 12 men) with ages between 20 to 31 years old ($M=22.49$, $SD=1.97$) who were enrolled in the fourth year of different degrees of the University of Granada: B.A. in Teacher of Childhood Education, B.S. in Speech and Language Therapy and B.S. in Psychology degrees. Table 1 shows the number of participants for each degree.

| Degree Study | Frequency | Percentage |
|--|-----------|------------|
| B.A. in Teacher of Childhood Education | 21 | 20.4 |
| B.S. in Speech and Language Therapy | 36 | 35.0 |
| B.S. in Psychology | 38 | 36.9 |

Measurements

An online scale was used to assess the skills needed for the final-year project [16]. This scale consist of a total of sixteen questions which collect relevant information about seven basic skills for the final project: databases information searching, using referencing style, using English for academic purposes, writing academic texts, using software for editing documents and for presentations, making oral presentations and planning skills. It is a 4-point scale (1= "I do not dominate this skill" and 4= "I totally dominate this skill"). To complete the scale students must read each sentence and self-assess in what point are their academic abilities.

3 RESULTS

Table 2 provides an overview encompassing participants' perceptions on the skills of searching for information and managing information and of using English for academic purposes. Regarding participants' ability of searching for information databases, as shown in Table 1, the majority of participants (83.3%) considered they can search for information in Spanish databases, although a high percentage of them stated they only dominate that skill to a little extent (41.8%). However when analyzing the skill for searching information in English, a considerable percentage of the participants (35.2%) indicated they do not dominate this skill at all, while another considerable percentage (39.6%) considers they only dominate that skill to a little extent.

Table 2 Results on participants' perception regarding their skills needed for accomplishing the final-year project

| | Percentage |
|--|-------------|
| Searching for information and managing information | |
| <i>Searching for information databases in Spanish databases</i> | |
| I completely master this skill | 6.3 |
| I master this skill to great extent | 35.2 |
| I master this skill to a little extent | 41.8 |
| I do not master this skill at all | 16.7 |
| <i>Searching information in English databases</i> | |
| I completely master this skill | 2.2 |
| I master this skill to great extent | 22.0 |
| I master this skill to a little extent | 39.6 |
| I do not master this skill at all | 35.2 |
| <i>Using referencing style</i> | |
| I completely master this skill | 16.5 |
| I master this skill to great extent | 51.6 |
| I master this skill to a little extent | 26.4 |
| I do not master this skill at all | 5.5 |
| <i>Using a references manager software</i> | |
| I completely master this skill | 1.1 |
| I master this skill to great extent | 4.4 |
| I master this skill to a little extent | 19.8 |
| I do not master this skill at all | 72.5 |
| Using English for academic purposes | |
| <i>Understating academic texts that are written in English</i> | |
| I completely master this skill | 8.8 |
| I master this skill to great extent | 33.0 |
| I master this skill to a little extent | 41.8 |
| I do not master this skill at all | 15.4 |
| <i>Writing academic texts in English</i> | |
| I completely master this skill | 4.4 |
| I master this skill to great extent | 11.0 |
| I master this skill to a little extent | 38.5 |
| I do not master this skill at all | 46.2 |

With respect to the skill of using referencing style, the majority of the participants (94.5%) state they know how to reference according to the referencing style in their degrees and more than half of the respondents state that they totally dominate this skill or they dominate it to a large extent. However when it comes to the use of a references manager software a large proportion of the students who took part in this study acknowledge they do not dominate this skill at all (72.5%) and another considerable proportion of the participants state they dominate this skill to a very little extent (19.8%).

Another basic skill which participants had to rate is their level of mastery of English for academic purposes. More than half of the participants consider they have very little skill (41.8%) or no skill at all (15.4%) in understating academic texts that are written in English. Furthermore a very high percentage of the students who took part in this study state they have very little skill (38.5%) or no skill at all (46.2%) in writing academic texts in English.

Writing academic texts is another necessary skill for elaborating final-year projects. As shown in Table 3, in this case almost all the students who took part in this study consider they are very skillful or skillful in writing grammatically correct sentences (98.9%), in summarizing ideas (100%) and in organizing the information in a logical order (100%). Also, the majority of the participants (95%) state they are skillful or very skillful in using software to edit the final-year project.

Table 3 Results on participants' perception regarding their skills needed for accomplishing the final-year project

| | Percentage |
|---|-------------|
| Writing academic texts in Spanish | |
| <i>Writing grammatically correct texts</i> | |
| I completely master this skill | 57.1 |
| I master this skill to great extent | 30.8 |
| I master this skill to a little extent | 9.9 |
| I do not master this skill at all | 1.1 |
| <i>Summarizing ideas</i> | |
| I completely master this skill | 47.3 |
| I master this skill to great extent | 46.2 |
| I master this skill to a little extent | 5.5 |
| I do not master this skill at all | 0.0 |
| <i>Organizing the information in a logical order</i> | |
| I completely master this skill | 58.2 |
| I master this skill to great extent | 37.4 |
| I master this skill to a little extent | 4.4 |
| I do not master this skill at all | 0.0 |
| <i>Using software to edit the final-year project</i> | |
| I completely master this skill | 71.4 |
| I master this skill to great extent | 24.2 |
| I master this skill to a little extent | 3.3 |
| I do not master this skill at all | 1.1 |
| Making oral presentations | |
| I completely master this skill | 16.5 |
| I master this skill to great extent | 40.7 |
| I master this skill to a little extent | 16.5 |
| I do not master this skill at all | 33.0 |
| I completely master this skill | 9.9 |
| Planning the final-year project | |
| <i>Establishing realistic goals</i> | |
| I completely master this skill | 19.8 |
| I master this skill to great extent | 56.0 |
| I master this skill to a little extent | 20.9 |
| I do not master this skill at all | 3.3 |
| <i>Establishing a schedule and fulfill it</i> | |
| I completely master this skill | 23.1 |
| I master this skill to great extent | 44.0 |
| I master this skill to a little extent | 29.7 |
| I do not master this skill at all | 3.3 |
| <i>Establishing priorities</i> | |
| I completely master this skill | 28.6 |
| I master this skill to great extent | 60.4 |
| I master this skill to a little extent | 9.9 |
| I do not master this skill at all | 1.1 |

In relation to the oral presentation of final-year project, a considerable percentage of the participants (33%) consider they have very little skill in making oral presentations and almost 10% of them states they have not skill at all.

Finally, concerning planning skills, as seen in Table 3, while 75.8% of the participants stated they were very skillful or skillful in establishing realistic goals, 20% of the participants considered that they dominate this skill to a very little extent this skill. Furthermore more than half of the participants (67%)

consider themselves skillful or very skillful in establishing a schedule and fulfill it. Also the majority of the participants consider they are able or very able to establish priorities.

4 CONCLUSIONS

The aim of this study was to analyze the perception of a group of final year undergraduate students from University of Granada regarding their level of mastery in different skills needed for the final-year project. Results show that participants are more confident about their level of mastery in some skills involved in the final-year project accomplishment while they are more insecure with some other skills. The participants feel more confident about referencing the cited literature according to the referencing style, writing academic texts in Spanish and planning for their final-year project. We found that the majority of the participants consider they master these skills. On the other hand participants feel less confident about skills such as searching for information in Spanish and in English, understanding academic texts that are written in English, making oral presentations and using reference manager software. A relevant percentage of the participants stated they only dominate searching for information in Spanish to a little extent and almost the majority of the participants considered they have very little skill or no skill at all in searching for information in English. Besides more than half of the participants consider they have very little skill or no skill at all in understanding academic texts that are written in English. Moreover many participants consider they have very little skill or have no skill at all in making oral presentations. Finally, the majority of the participants consider they are not skillful or have very little skill in using reference manager software.

Final year students who prepare the final-year project need to receive more training and support so they can feel confident in their ability to search for information both in Spanish and in English, to better understand English written academic texts, using reference manager software and in making oral presentations.

4.1 Limitations and contributions of this study

Although this study provides us with important knowledge on final-year project it has some limitations that are worth mentioning. Firstly, because we explored students' perceptions regarding their skills, students have to self-assess themselves. Some students are capable of rendering accurate and honest answers about their skills but others are not. Furthermore we have only examined students' perceptions on the skills needed for the accomplishment of the final-year project in one university, examining these aspects in different universities may result in a different set of results.

However despite these limitations, this study provides a starting point for discussions within the higher education system on students' perceptions on the skills needed for the elaboration of the undergraduate final-year project. This could be particularly useful because it provides tutors with valuable information on students' beliefs on their proficiency with basic competences and can help tutors design suitable teaching activities that can increase students' opportunities to be successful with their final-year project.

4.2 Future research

Future studies should examine students' perceptions regarding their skills for completing the final-year project in different degrees and universities in order to obtain and compare the information. It would be also worthy to obtain more information about the undergraduate students such as motivation or strategy of learning. Given the difficulties that the undergraduate student may have with some skills, it would be advisable to plan different courses to prepare them in the abilities needed to perform the final-year project from the initial degrees courses. In this sense, one of these courses could be academic English.

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