LOOKING FOR THE SUCCESSFULLY TRANSITION FROM PRE-UNIVERSITY TO UNIVERSITY CONTEXTS: THE ROLE OF SELF-ASSESSMENT PROCESSES AND MATURITY

Línea Temática: 1. Experiencias pedagógicas e Innovación en ámbitos educativos no universitarios

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Resumen: Adequate education systems should not focus only on the transmission of knowledge from teachers to pupils. It should be concerned with the fundamental aspect of education, which is learning. To achieve this objective is important to develop the autonomy of students. Therefore, self-assessment processes may contribute to the successfully transition of students form pre-university contexts to both university programs and the labour market.

This research develops a longitudinal study that analyses the links between self-assessment processes and positive academic results. The influence of maturity is also analysed. Discussion of results and implications for practice are also included.

Palabras Clave: self-assessment, academic results, maturity, pre-university courses, university
1. Introduction

The works of Govindasamy (2002) and Alonso et al. (2008) highlight that a genuine education system should not focus only on the transmission of knowledge from teachers to pupils. It should be concerned with the fundamental aspect of education, which is learning. In this way, Alonso et al. (2008) define learning as the acquisition of new mental schemata, knowledge, abilities and skills that can be used to solve problems potentially more successfully.

This approach to learning is adequate if we consider that in an increasingly dynamic and competitive educational, cultural, socio-economic and labour context it is not enough for students to acquire extensive theoretical or practical knowledge in so specific particular areas (Fallows and Steven, 2000). Therefore, authors such as Cambra and Cambra (2007a) and Pollit (2001) discuss about the importance of developing a critical and reflective attitude among students to prepare them for facing particular educational, social and business demands and, consequently, to access to higher educational level and to successfully enter the labour market. These authors argue the need to create an increasingly flexible people, capable of adapting to different contexts, responsible and able to think for themselves. In this framework, critical, reflective and responsible self-evaluation processes may contribute to developing such an attitude.

Both literature and practice (e.g., Cassidy, 2006; Peckham and Sutherland, 2000) encourage students to develop as independent learners, to cope with the changing curriculum demand and structure of higher education, and to meet the employers’ expectations. That happens because independent learning has become a priority in both educational and employment contexts. Characterising the independent learner may involve a range of attributes, skills and propensities but, in any case, the ability to self-assess appears as an important issue in many studies that examine the independent learning (e.g., Cassidy, 2006).

Developing capable independent learners able to self-assess their activity may be crucial to understand the success or the failure in the transition from high-school to university. For instance, Lowis and Castley (2008) have recently commented that first-year students dropout in the university sector can reach 20% or higher. In order to analyse the main reasons of that, they propose a model which includes aspects such as the student’s actual and perceived performance, the enjoyment of the subjects, the identification with the student role or the personal contact with academics and friends. The research of Lucas and Meyer (2004) concludes that students not only need a better understanding of themselves as learners but also a better understanding of their real objectives in that educational stage. As university studies require a great deal of independent studying, the work of Lindblom-Ylanne (2004) concludes that successful students have to have good self-regulation and study skills and awareness of their conceptions of learning and knowledge. Cassidy (2006) analyses a sample of first-year undergraduate students and finds a positive correlation between a deep approach to learning, self-assessment skills and results demonstrating the relevance of learning styles, and self-assessment processes to get positive results in the university context.

Therefore, based on the above arguments, we aim to contribute to both literature and practice by offering a model based on real and practical experience within in-class interaction with students able to explain some of the key factors affecting the success of their self-assessment processes. This research also demonstrates that students’ self-assessment process may explain satisfactory academic results in both pre-university and university contexts.

We offer a longitudinal study based on an initial sample of 96 students involved in the last course of the Spanish pre-university studies, and we analyse their situation i) after the first-year of the undergraduate studies, ii) during their third year (in some cases just before finishing their
undergraduate program), and iii) during their fifth year (for those involved in 5 years degrees). In order to justify our analysis regarding first high school contexts, we use arguments based on the need of teaching and supervising the mechanisms that students utilize to develop their self-assessment processes. In this way, we also have to refer to the research of Brookhart et al. (2006), which considers motivation, effort, and responsibility, among other factors, as key references in the pre-university context.

Results are based on both quantitative and qualitative data. Hypotheses are tested through the structural equations methodology by using the EQS software. Conclusions are complemented by a set of in-depth interviews with students which have been analysed by using the NVivo software.

To achieve our objectives this article is organised as follows. Section two establishes the theoretical framework of reflective learning and self-assessment processes, and their relevance in both educational and labour contexts. Section three develops the hypotheses of the causal model. Section four presents methodological issues and results. Section five offers a discussion and comments about implications of this research for both literature and practice, and finally section six concludes with a brief summary of the highlights in the paper, this research limitations and proposals for future research.

2. Reflective learning and self-assessment processes

Learning can take a variety of different contexts. To reach satisfactory levels, learning requires a level of planning that is commensurate with the outcomes that can be achieved. People need to decide upon what the better resources are and how to embed “hallmarks of quality”. In this framework, assessment—as a process which makes a judge in relation to some criteria related to objectives, strategies, resources, and achievements—may contribute to establish a reference criterion for planning, organizing and evaluating the grade of objectives achievement. Therefore, as MacDonald (2006) highlights, evaluation has become an everyday activity for many of us, whether our practice in the classroom, the student experience, institutional performance or funded projects.

The work of MacDonald (2006) analyses the concept of evaluation. He discusses about the main reasons for assessing the activity of both students and teachers. Not only why evaluate, what to evaluate, how to evaluate or when to evaluate, but also by whom the evaluation is carried out: those are the main questions responded in that article. Considering the objectives of our research, we need to analyse who is responsible for assessment. MacDonald (2006) and Orsmond et al. (2004) recognise the growing use of collaborative and critical evaluations among both teachers and students. Therefore, students become active agents, not only in the learning process but also in the assessment activity: assessment must be included as a key competence for students, allowing them to analyse the teachers’ activity and also their own performance.

As discussed in the introduction section, higher education policy needs to ensure that those who are involved in that educational level have the competencies that enable them to enter into the labour market (Martinez, 2008; Cambra and Cambra, 2007b). Based on behavioural, educational and psychological principles Martinez (2008) and Cassidy (2006), among other authors, identify a key competence: working and learning independent and effectively, self-directed. In addition, self-criticism and self-assessment processes must be considered as a reference. Students need to develop the ability to compare actual and desired performance (Orsmond et al., 2004) but they need first to be aware of themselves as learners (Lucas and Meyer, 2004).

Sometimes, as Smith et al. (2007) recognize, the major challenge for students is learning to be reflective about themselves. Self-assessment requires high levels of self-awareness and the ability to monitor one’s own learning and performance (Cassidy, 2006). People need to think about thinking, to
be aware of the learning processes and to utilize that in new learning. Self-assessment processes are related to the learners’ automatic awareness of their own knowledge and their ability to understand, control and manipulate their own cognitive processes.

The work of Cassidy (2004) defines deep approach to learning -intention to understand, relation of ideas, use of evidence and active learning- versus surface approach to learning –intention to reproduce concepts or ideas, unrelated memory, passive learning and fear of failure-. That research also considers strategic orientation of the learner –study, time management, alertness to assessment demands or intention to excel- and apathetic orientation of the learner –lack of direction and lack of interest-. That research reports i) positive associations between students’ self-reports of their academic proficiency and a deep approach to learning, ii) positive association between strategic-deep approaches and academic achievements, iii) negative associations between students’ self-reports and a surface approach to learning, and iv) negative associations between apathetic-surfaced approach to learning and academic achievements. In a later study, Cassidy (2006) establishes a link between deep and strategic approaches with self-assessment skills, and therefore, he allows us to make a relation between self-assessment processes and positive academic results.

The approach proposed by Rivers (2001) discusses the students’ self-directed learning behaviour based on the relevance of factors such as the students’ regular assessment of their academic performance, their approach to learning and how different is that approach from the one of their peers, regarding the teaching styles used. This research also identifies positive links between independent learning, self-assessment processes and satisfactory academic results.

The research developed by Brookhart et al. (2006) is focused on results and self-efficacy. This study considers the influence of prior student characteristics and experiences, motivation and effort. Motivation is defined as a disposition toward something; in this case, it could be defined as the fact of respecting self-assessment processes and achieving satisfactory results (p. 156). Motivation is connected to effort and it is expected to develop persistence and adaptive behaviours and strategies. Outcomes and consequences include both self-efficacy and the achievement of positive/ satisfactory academic results.

Carless (2007) proposes a framework for understanding self-assessment defined by students’ experiences and characteristics, advice received from tutors and teachers, students’ involvement in the process, and feedback as feedforward. In this line, when well implemented, self-assessment processes will support students in developing dispositions for lifelong learning.

3. Hypotheses development: causal model

This research aims to explain the contribution of reflective learning and self-assessment processes to achieve satisfactory academic results in pre-university and university contexts. In this line, those students able to develop adequate self-assessment processes may manage transition from high-school to university better than others. We do not aim to identify what elements are antecedents of good academic results; we only aim to analyse if reflective and self-assessment processes may contribute to positive results. Therefore, our model takes by reference some of the key elements that literature considers as antecedents of self-assessment processes, and a specific link between self-assessment and academic results. This model is shown in figure 1.

Our model considers the influence of advising, student’s responsibility, motivation and self-concept on the efficiency of self-assessment processes. It also considers self-assessment processes as antecedent of satisfactory academic results. A broader discussion of these constructs as well as the complete justification of hypothesis can be found in Cambra and Cambra (2007a, 2007b). As explicit references, we include the set of five hypothesis:
**H1:** Advice received by students with respect to self-assessment processes influences on the students’ decision to develop self-assessment processes.

**H2:** The students’ responsibility influences on their decision to engage in self-evaluation processes.

**H3:** The students’ motivation influences on their decision to engage in self-evaluation processes.

**H4:** The students’ positive self-concept has a direct, positive effect on their decision to engage in self-evaluation processes.

**H5:** The students’ critical and responsible self-evaluation contributes to improving their academic results.

What this research adds is the analysis of the effect of students’ maturity and in what extent self-assessment processes may contribute to a better transition form pre-university to university studies. This research develops a longitudinal analysis and, by using the same sample of students, compares results in different stages.

4. **Methodology and results**

To achieve the objectives of this research we have worked with both qualitative and quantitative data, under a longitudinal approach. The use of longitudinal studies to identify and analyse factors related to learning has been defended by literature (e.g., Lowis and Castley, 2008).

4.1. **Preliminary data**

Preliminary data has been obtained from a group of 8 students reading pre-university studies in a high school from the north of Spain. The main objective was to verify if the students from that high school received some kind of information, orientation or training concerning the self-assessment processes, and, in case of a positive response, to check if that orientation was appropriate. The session was recorded and subsequently transcribed, being attended by two members of the investigation group. While the analysis was taking place, the information took shape thanks to our two investigators’ notes, and afterwards, the complete database was elaborated.
This database has been managed and analysed by the QSR NVivo software, specializing in qualitative data analysis. Consequently, given the successful results, the adequacy of the students from this high school as a reference for our investigation was determined.

4.2. First surveys: pre-university course

Data in the first step of the quantitative analysis has been obtained from a survey of students in the last year of pre-university education. The reason for approaching these students not only was chiefly related to their maturity level, but also because reflective strategies could be very interesting for the following educational level: university.

We requested voluntary participation and ensured anonymity. Thus, of 193 surveys distributed only 96 were adequately completed and returned. We identified which students were participating although we did not identify what their specific surveys were, so anonymity was assured but it allowed us for future contacts. We would like to highlight that prior researches (e.g., Brookhart and Durkin, 2003) have used similar sample, with some sub-samples ranged from 11 to 39. For this reason, our sample size may be adequate. Recommendations made by Hair et al. (1999) about the use of structural equations and EQS software also consider sample sizes around 100 people. Table 1 presents the technical specifications of the study.

<table>
<thead>
<tr>
<th>Table 1. Technical data of the fieldwork</th>
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<tbody>
<tr>
<td><strong>UNIVERSE</strong></td>
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<tr>
<td><strong>GEOGRAPHICAL SCOPE</strong></td>
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<td><strong>SAMPLE</strong></td>
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<td><strong>SAMPLING METHOD</strong></td>
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<td><strong>RECOLECCIÓN DE DATOS</strong></td>
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<td><strong>FIELDWORK</strong></td>
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<td><strong>DATA ANALYSIS</strong></td>
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Surveys were based on a set of Likert’s scales to measure the students’ reflective capacity and the extent to which this reflection and self-assessment process contributes to improving their academic results. We also included scales relating to the students’ motivation, responsibility and their own self-concept. This set of scales, as well as the whole process of validation can be found in Cambra and Cambra (2007a).

To test the significance of the hypothesis we used structural equation analysis with the EQS program. We obtained the results that are shown in Table 2. We note that the hypotheses are significant at the 5% level in all cases, and the standard deviations range from 0.487 to 0.753.

Thus, these data show that, as suggested by the model, within the pre-university context, the teachers’ information and encouragement to engage in self-evaluation processes influence this process ($\lambda_{est}=0.678$, $p<0.01$), so $H_1$ is satisfied. We also find that the students’ responsibility has a decisive influence on their decision to self-evaluate ($\lambda_{est}=0.525$, $p<0.05$), so we can support $H_2$. Students’ motivation ($\lambda_{est}=0.487$, $p<0.05$) and self-concept ($\lambda_{est}=0.517$, $p<0.01$) are also factors influencing their decision to self-evaluate their behaviour and academic performance, so hypotheses $H_3$ and $H_4$ are fulfilled, respectively. Finally, once the students decide to self-evaluate in a critical and
responsible way, the data show that their academic results improve ($\lambda_{\text{est}}=0.753$, p<0.01), so $H_5$ is also satisfied.

**Table 2. Test of Hypotheses (structural coefficients for the pre-university context)**

<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>Standardised-coeff.</th>
<th>T-VALUE</th>
<th>$H_i$: YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice- Self-assessment</td>
<td>0.678&lt;sup&gt;a&lt;/sup&gt;</td>
<td>8.527</td>
<td>$H_1$: YES</td>
</tr>
<tr>
<td>Responsibility- Self-assessment</td>
<td>0.525&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.421</td>
<td>$H_2$: YES</td>
</tr>
<tr>
<td>Motivation- Self-assessment</td>
<td>0.487&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.288</td>
<td>$H_3$: YES</td>
</tr>
<tr>
<td>Self-concept- Self-assessment</td>
<td>0.517&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.812</td>
<td>$H_4$: YES</td>
</tr>
<tr>
<td>Self-assessment- satisfactory academic results</td>
<td>0.753&lt;sup&gt;a&lt;/sup&gt;</td>
<td>10.850</td>
<td>$H_5$: YES</td>
</tr>
<tr>
<td>GOODNESS OF FIT OF THE STRUCTURAL MODEL</td>
<td>RMR= 0.56; RMSEA= 0.067; NFI= 0.925; NNFI= 0.921; AGFI= 0.918; CFI= 0.923; IFI= 0.933; Normed $\chi^2$= 1.98</td>
<td></td>
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<tr>
<td>EXPLANATION CAPACITY</td>
<td>Self-assessment $= R^2 =0.741$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Academic results $= R^2 =0.291$</td>
<td></td>
<td></td>
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</table>

<sup>a</sup>: Significant for the 99%  
<sup>b</sup>: Significant for the 95%

Analysing now the $R^2$ data, almost 75% of the variance of self-assessment is explained by the effect of advice, the students’ responsibility, motivation and self-concept ($R^2 =0.741$). With regard to the academic results, approximately 20% of their variance ($R^2 =0.291$) can be explained by the direct effect of these self-assessment processes. These data reveal that our model can adequately explain the motives behind students’ decision to self-assess, and that also a consistent self-assessment helps to improve results. But the $R^2$ value (0.291) means that the improvement in results is not only due to the self-assessment processes. In this respect, in order to increase the model’s explanatory capacity of the improvement in students’ academic performance we need to include other variables likely to influence such performance: effort expended, time dedicated to study, difficulty of material, or attitude in class. But in spite of this situation, we must remember that the main objective of the current study is to identify the relevance of self-assessment antecedents and to determine whether these processes really do have a positive influence on the students’ academic performance. The sample data indicate that this is indeed the case, as we expected, and that our model is consequently adequate.

4.3. Surveys during the university context

Based on the high-school database, we kept in touch with students involved in the pre-university study. Differences in sample size are related to mortality in sample sizes (e.g., students who did not reach university levels or students who finally did not collaborate in future steps of the study).

We distributed our surveys again, both in June, 2006 (just finishing the first university course) and June, 2009 (just finishing the third course; we highlight that based on the current Spanish context this course may belong to the last course for basic programs or the middle course for long degrees). After validating the scales data about the goodness of fit of the measurement model were also satisfactory.

Results of the test of hypothesis for both periods are also included in Table 3. This table also shows data related to the goodness of fit of the structural model and $R^2$ for both self-assessment process and the link between self-assessment and satisfactory academic results.

Data suggest the significance of all the hypothesis in both periods, at the beginning and by the end of university courses. Based on the value of the standardized coefficients, we must highlight that the effect of responsibility and motivation on self-assessment is more intense at university than in pre-
university levels. The effect of self-assessment processes on academic results is also more intense at higher educational levels than in pre-university studies. This may be related to the students’ feeling of lack of control of their learning activity from teachers and, therefore, they think that self-autonomy is determinant in order to achieve positive results. However the lower influence of advice in self-evaluation during higher university courses may be related to the autonomy of students and interests of teachers in specific topics of the programs. Higher values of $R^2$ in the relationship between self-assessment-academic results with regard to pre-university levels may perhaps indicate that, for university studies, self-assessment processes may be more relevant than factors such as the difficulty of material or time dedicated to study. In this sense, our results about the relevance of self-assessment may contribute to prior studies developed by Lowis and Castley (2008) and Lindblom-Ylane (2004) to avoid students’ dropout during the first university courses and to achieve satisfactory and positive academic results.

Table 3. Test of Hypotheses (University context: first & third year)

<table>
<thead>
<tr>
<th>UNIVERSITY (YEAR); SAMPLE SIZE</th>
<th>first year n= 87</th>
<th>third year n= 79</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYPOTHESIS</td>
<td>STANDARD coeff.</td>
<td>T-value</td>
</tr>
<tr>
<td>Advice- Self-assessment</td>
<td>0.646a</td>
<td>8.043</td>
</tr>
<tr>
<td>Responsibility- Self-assessment</td>
<td>0.611a</td>
<td>7.992</td>
</tr>
<tr>
<td>Motivation- Self-assessment</td>
<td>0.504a</td>
<td>6.021</td>
</tr>
<tr>
<td>Self-concept- Self-assessment</td>
<td>0.544a</td>
<td>5.003</td>
</tr>
<tr>
<td>Self-assessment-satisfactory academic results</td>
<td>0.794a</td>
<td>12.058</td>
</tr>
</tbody>
</table>

GOODNESS OF FIT OF THE STRUCTURAL MODEL
RMR= 0.54; RMSEA= 0.066; NFI= 0.927; NNFI= 0.920; AGFI= 0.919; CFI= 0.923; IFI= 0.934; Normed $\chi^2$= 1.97
RMR= 0.52; RMSEA= 0.061; NFI= 0.932; NNFI= 0.926; AGFI= 0.922; CFI= 0.926; IFI= 0.937; Normed $\chi^2$= 1.93

EXPLANATION CAPACITY
Self-assessment = $R^2$ =0.761
Academic results= $R^2$ =0.312

Self-assessment = $R^2$ =0.772
Academic results= $R^2$ =0.319

4.4. In-depth interviews

We complemented quantitative with qualitative data. We developed some focus groups and in-depth interviews with those students involved in 5 years degrees by the end of June, 2011. These interviews collected data related to the main challenges for both accessing to the university and getting positive academic results in university studies. We worked with a committed group of 12 students which allowed us to develop a qualitative longitudinal study too. Working with small samples of students for qualitative studies has been used by previous studies (e.g., Lindblom-Ylane, 2004) and allows researchers to have more intensive interactions with participants. Those students were taking different undergraduate programs such as business, law, chemistry, medicine and engineering.

All the interviews were recorded and transcribed for analysis. All the information was added to the complete database and managed with the software QSR NVivo. The use of specialized software for the analysis of qualitative data has been discussed by McLaran and Catteral (2002). After analysing all the information, we developed a coding system, which considers variables related to self-assessment processes. Conclusions highlighted the relevance of self-assessment processes to
achieve academic goals. For instance, we include in this paper some of the most representative verbatims from those included in the whole database:

-In my opinion, unless somebody had taught me in high school how to evaluate my planning and my work myself, it would have been difficult for me to adapt to the university in such a short period of time. It’s true that professors have tutorial schedules and they try to respond to the students but what kind of information are you going to consult if you don’t even know what is the information that you really need? A previous reflection on this matter is needed for the tutorials to be really effective.

- Personally, I think that teachers’ help is not really necessary to pass a law exam or to get your degree. Knowing how to organize your time or your material, and knowing the way to manage one’s own affairs is much more important. In this way, you don’t get stressed when exams are coming.

- Here in the university, nobody is going to worry as much as teachers did in high school. Even if professors affirm that they pay attention to the students progress, it’s very difficult for them to carry out an individualized follow-up of the 120 students in the first year, or 25 in the last courses… you have to take care of yourself, you are the responsible. In my case, I did not have many problems because in high school we were taught the importance of self-evaluation and the way to learn lines of action.

- I have met some classmates that never had that orientation, and they have had much more problems than me. Some of them got through this by working very hard but others were unsuccessful. I talked to a friend about my methods and he liked them, that’s why he asked me for help, and now he admits that these self-evaluation methods have been very helpful. He also emphasizes that, using this way of learning, preparing for essays and exams is not so complicated as before.

For that reason, the idea of the importance of self-evaluation in order to get satisfactory results is reinforced, and even more when the fact of getting in touch with professors decreases and students’ autonomous and self-regulated work become necessary. This qualitative study data also suggest that, in comparison with students that have been educated following this kind of training and orientation, it is more difficult for all those students that have not received any training concerning self-evaluation processes to pass the first years in the university.

Furthermore, these data stress the importance of advising and motivation as antecedents of the students’ stimulus to develop self-evaluation processes.

5. Summary of findings

1. Self-assessment processes contribute to getting satisfactory academic results.

2. University degrees require autonomy and self-administered work by students. Self-assessment processes may contribute to reducing students’ dropout rates during the first-years university courses, getting positive results within undergraduate programs, and preparing students for accessing to the labour market.

3. Advising and training are necessary for developing adequate self-assessment processes.


5. Maturity contributes to reinforce the link between self-assessment and academic results. Mature students comment that self-assessment may contribute to reduce effort regardless of whether the material is difficult or not.
6. Discussion

As Barker (2008) recognise, learning can take place in several and different contexts. Therefore, learning design should be considered as a complex process that is intended to support learning or training activity in a specific environment. Our research refers to the transition from pre-university courses to university. In our experience, students coming to university are often ill-prepared for what is required in higher education. This is in line with the work of Lowis and Castley (2008) and Lindblom-Ylanne (2004) among other works, and may explain, at least partially, why during the first-year university courses students’ dropout reaches high rates. Students require training and advising for the challenge of university, and the necessary tasks and skills need to be developed before, during the pre-university courses.

Students at all educational levels need to develop their personal capabilities. Students need to acquire general skills and interact with their environment in an active, critical and reflective way and, therefore, the educational context must make a significant contribution to help students to develop these skills. Those students well trained in self-assessment processes may get both better academic results and good preparation for the labour market.

Prior studies demonstrate that self-assessment processes contribute to improve students’ independence and academic results (e.g., Cassidy, 2006). Irving et al. (2003) defend that academic results can be improved if students think and reflect not only about the content of subjects but also about their effort, attitude and dedication. Reflection, self-autonomy and self-efficacy are factors also highlighted in the works of Carless (2007) or Brookhart et al. (2006). This is extremely important in the university context because, as already commented in prior sections, students are not under teachers’ control and they are used to being in a relatively independent and self-guided context.

However, developing adequate study practices requires a great deal of work. During pre-university courses students may find close relationships with teachers and tutors, but once they start university more independent and autonomous studies are carried out. Based on this idea, both literature and practice defend the concept of developing self-assessment tasks. In this context, self-assessment processes may contribute to training students on autonomy and independence not only for university studies but also for the labour market (Cambra and Cambra, 2007a; Cassidy, 2006; Pollit, 2001; Peckham and Sutherland, 2000).

As already commented in section two, students’ academic results can improve if they think and reflect not only about the content of their programmes or subjects, but also about their attitude, effort and dedication to study. Our results show that self-assessment processes contribute to achieve positive academic results. However, developing self-assessment processes needs advising, motivation and training. Students are not able to learn by themselves; nevertheless, developing this activity means that students are likely to gradually assume some responsibility. For this reason our research considers a longitudinal approach from the last pre-university course (Spanish context) to the first and third year of undergraduate programmes. Through all this time we must highlight that the tutors’ actions are fundamental for orienting the students.

Also based on our in-classroom experience, another key factor for developing teaching-learning systems that foster reflection and self-assessment processes is to ensure the active participation of the students in the definition of objectives. Practice also shows that not all the students want to develop self-assessment processes. In general, as students grow older they become more mature and responsible, and hence their participation in this process may increase. With reference to the specificities of the university context, Lowis and Castley (2008) comment that students need to know what they are doing well or not at the university, how to analyse their strategies for study and exams
preparation in order to know if they’re adequate, or what are their high-low points. Those more mature students and/or already well prepared for developing self-assessment processes may get these points by themselves although interaction with tutors and teachers is also required. This is extremely important during the students’ first contact with university.

If we now reflect on the best practices for developing self-assessment processes and properly prepare our students to access to higher educational levels and to successfully enter the labour market, educative agents need first to consider that there is no single right way of achieving educational aims nor of evaluating them. In any case, we need to create the right culture, climate and environment for evaluation to be effective, where the emphasis is on learning from mistakes and success, rather than merely apportioning blame or praise (MacDonald, 2006).

When properly implemented, self-assessment processes can be used for assisting in the diagnosis of study problems and methods and, therefore, contribute to improving study success. Under this framework, the students are aware of the learning objectives, strategies and potential study problems for them. Students strengthen their conceptions of their approaches to study and get tools to better develop their study practices. This is extremely important during the university studies, where more independence and self-management are necessary comparing with pre-university levels.

Based on the relevance of self-concept, we need to highlight that students need to be aware of their specific characteristics not only as students but also as people. In this sense, they must reflect on their own learning approaches and conceptions. Practice and in-class experience have shown us that, sometimes, considering and analysing the self-concept factor is not a simple issue for young students. Maturity and training are necessary for developing self-concept. For this reason, it is possible that the influence of this factor have resulted weaker during the pre-university courses than in the university context. In any case, students not only need the tutors’ support but also the family’s. Advising does not necessarily require more of the educator’s time but it requires that time is spent differently (Lucas and Meyer, 2004). However, advising is extremely important because objectivity is decisive when self-concept is analysed and, depending on that, adequate self-assessment processes may be developed.

Active learning approaches—deep and strategic—might improve self-assessment skills (Cassidy, 2006) and, therefore, they may contribute to better academic results. Consequently, teachers and tutors must train students in line with the bases of these active learning approaches, where the use of feedback contributes to better results (Orsmond et al., 2004).

In this sense, ideas proposed by Linblom-Ylanne (2004) are highly relevant. Those students whose profiles are coherent do not present study problems in the university context but instead they want to improve their study success. Based on our data and our in-class experience, these students are more receptive to advice, more responsible and are used to developing self-assessment processes as a way to improve their academic results. Therefore, they are better prepared for higher studies and better prepared for accessing to the labour market than those students who do not self-assess their activity. Students who do not self-assess their activity experience study problems and may dropout their studies.

7. Conclusions

Our research shows how self-assessment processes, based on advising, responsibility, self-concept and motivation, contribute to positive academic results. Self-criticism and self-assessment activities require not only maturity but also advising and training. To be prepared for the university and to access to the labour market the process need to start some time before and, therefore, the role of teachers, tutors and family during the pre-university courses is decisive.
In spite of the relevance of results and implications for practice, we need to recognize some limitations. First, we have applied the model to a specific context: the Spanish (pre)university education. In addition, any attempt to extrapolate the study’s conclusions would require previous analysis of the similarities and differences between the contexts. However, the conceptual framework seems to be adequate for illustrating the relevance of responsible self-evaluation processes in improving students’ academic performance and in developing some skills that are in increasing demand in the labour market nowadays. Both the mix of qualitative and quantitative data and the longitudinal approach also reinforce our conclusions.

Second, with regard to the sample, although it is based on a group originally belonging to the same high school, they have studied different university degrees. We should also point out that all the students participated anonymously and voluntarily, so we can assume that they acted in a responsible way as well.

Finally, proposals for future research may include the analyses of the relevance of effort. Depending on definitions, researchers may consider effort as a proxy variable in relation to motivation. However, authors such as Brookhart et al. (2006) recognize some differences between these variables. Effort highlights that motivated students decide to take action (p. 158), and outcomes and consequences also include both self-efficacy and the achievement of positive/satisfactory academic results. This would probably increase the explanation capability of the model.

References

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