

The Role of Feedback in the Bologna Process, According to Goal Setting Theory: An Exploratory Study of Students' Perceptions

Miriam Puig Terrón

Jordi Balagué i Canadell

Joan Solé-Pla

University of Girona
Faculty of Economics & Business
Carrer Universitat de Girona, 10
17003 Girona (Catalonia), Spain

Abstract

This study has been carried out while The Bologna Process was implemented in the European Higher Education Area (EHEA). One of the main features of TBP is Lifelong Learning (LLL), introduced to improve student learning, by emphasizing the role of feedback. The Goal Setting Theory of Motivation (GST) considers feedback as a mechanism to enhance performance. Starting from this theoretical framework, our objective is to analyse whether, for those students with specific and challenging goals, feedback enhances student motivation to perform at a high level. Interviews have been conducted with students who have experienced both Bologna and non-Bologna learning. The main finding is that a small increase in feedback entails a slight or no increase in the average scores of those students with specific and challenging goals; whereas for students with much general goals or no goals, the average score greatly increases.

Keywords: Feedback, Goal Setting Theory, Lifelong Learning.

1. Introduction

1.1. Problem Statement

European countries are going through a process of reform of the different Higher Education Systems, The Bologna Process (TBP). Europe is evolving towards the European Higher Education Area (EHEA). The aim of the Bologna Process was to establish an EHEA and to promote mobility within Europe and from Europe to the rest of the world. The origins of this Process lie at the Bologna Declaration of 19 June 1999, signed at that time by 29 countries, a number that has now increased to 46. The reforms included in the Bologna Process are based on several objectives:

- Taking into account the European dimension in Higher Education.
- Adopting a system of easily readable and comparable degrees.
- Adopting system that is based essentially on two cycles: undergraduate (Bachelor's) and graduate (Master's and/or a Doctorate degree).
- Establishing a system of credits that enables programmes comparison among European countries –the European Credit Transfer System (ECTS).
- Promoting the mobility of both students and staff.
- Focusing on lifelong learning (LLL).

Those objectives are slanted towards to a student-oriented learning process (Attard, Di Loio, Geven, & Santa, 2010). In a learner-oriented environment, lecturers follow seven principles (Weimer, 2002), of which one is the on-going delivery of feedback to students as a means of improving their learning. Therefore, LLL involves making greater use of feedback, which is realized through continuous assessment.

By emphasizing the role of feedback, our research questions are:

- Will this new orientation of learning improve students' motivation to perform at a high level?
- Will the fact that students have goals increase their performance?

We have chosen Goal Setting Theory (GST) to represent the theoretical context of this project, since it takes into account the four key elements that constitute our problem case: Feedback, Motivation, Goals and Performance.

1.2. Purpose of Study

The GST considers feedback as a mechanism to enhance performance. Based on this theoretical framework, our objective is to analyse whether, for those students with specific and challenging self-set and short-term goals, feedback improves their motivation to perform at a high level. This exploratory study has been conducted under very particular conditions. It has taken place during the academic year in which the academic curricula have been changed in our institution to adapt old degrees to the new European context: TBP.

We considered a 2x2 analysis related to different characteristics of goals, establishing two axes: specific/general and challenging/non-challenging. We consider a goal as specific when it refers to a concrete value, and challenging when it is specific and it also implies increasing or maintaining the students' average score, related to their academic performance. Otherwise, goals are general and/or non-challenging. We have out three hypotheses in order to find empirical evidence regarding our objective. *Hypothesis 1 (H1): Students with specific and challenging goals have a higher performance than those who have more general or no goals.* According to the GST, specific and challenging goals lead to a higher level of performance. Therefore, the first hypothesis aims at finding out whether students have career goals (long-term goals) and/or academic goals (short-term goals). *Hypothesis 2 (H2): Students' perception of feedback is more helpful in attaining goals for those who have specific and challenging goals than for those who have general, non-challenging goals or no goals.* The second hypothesis relates to the context of TBP, since it deals with students' perceptions of feedback. Our purpose is to know the students' personal assessment of feedback before and after the LLL. *Hypothesis 3 (H3): Students' average score increases as a result of the change in feedback brought about by TBP (LLL).*

Finally, after analysing the relationship between goals and performance (H1) and between goals and perceptions of feedback (H2), the last hypothesis aims at connecting the theoretical (GST) and contextual (TBP - LLL) parts of this work. Our objective is to analyse the change of the students' academic performance in this framework.

1.3. Scope of Study

In 2010, the Bologna Process was implemented in the Economics and Business Faculty of the University of Girona (Catalonia, Spain). The study has been conducted with students from the Bachelor's Degree in Business Administration who have experienced non-Bologna and Bologna learning. All interviewed students were from the Faculty of Business and Economics at the University of Girona. These students can compare both types of learning and are thus able to convey their perceptions of feedback.

We have chosen this degree because it is comparable at national and international level and because the Bologna Process has not meant a significant change to the course. We have not taken into account the other two bachelor's degrees of the faculty as, on one hand, the Bologna Process has meant a considerable change to the Bachelor's Degree in Accounting and Finance, and on the other hand, the students of the Bachelor's Degree in Economics represents a minority in the faculty.

2. Literature Review: GST

A synthetic overview and classification of the popular motivational theories can be found in Morgan & Baker (2012). There are two broad categories of motivation theories, each relying on different typologies of motivational factors: Content theories, which stress intrinsic factors; and Process theories, which stress primarily extrinsic factors. The GST is a Process theory that constitutes a first-level explanation of action¹. Its core assumption is that human action is directed by conscious goals and intentions. So, people have goals² to decide what tasks they will do and how well they will do them. (Locke & Latham, 1990). This theory defines the relationship between goals and task performance, and the variables affecting this relationship (*Ibid.*). It states that specific and challenging goals lead to a higher level of performance than easy or general goals do (Locke and Latham, 2006).

¹ GST does not give a full explanation of human action, since explanation exists on different levels (Ryan, 1970, cited by Locke & Latham, 1990).

² "The precursor of a high level of work motivation will be present when the individual is confronted by a high degree of challenge in the form of a specific, difficult goal or its equivalent." (Locke & Latham, 1990).

The goal-performance relationship involves the existence of two types of variables: Mediators and Moderators. The Mediators are those variables (Direction, Effort, Persistence, and Task Specific Strategies - Locke and Latham, 2013) by which goals affect performance. The Moderators are those variables (Ability, Self-Efficacy, Goal Commitment, Feedback, Task Complexity, and Organizational Constraints - *Ibid.*) that affect the strength of the relationship between goals and performance.

Feedback and its role in the GST are the core element of this work. Feedback is defined as the knowledge of results of one's performance, which allows the tracking of one's progress in relation to a goal (Locke & Latham, 1990). It plays two roles in the GST. First, feedback is a moderator of the goal-performance relationship. Second, goal setting mediates the feedback-performance relationship, i.e. specific and challenging goals enable the relationship between feedback and performance (Locke & Latham, 2013). To analyse the feedback-performance relationship, we will focus on the second role. The GST is considered an open theory, that is, it accepts new contributions (Locke & Latham, 1990). In addition, although this theory is a work motivation theory, it has also been applied to educational motivation (Locke & Latham, 2013). New possible applications of the GST are suggested by Locke & Latham (2015).

3. Method: Interview Design and Implementation

We have chosen a qualitative research methodology (specifically, interviews). This methodology gives access to a wide range of information, opinions and perceptions, which provide a framework that allows the interpretation of how feedback affects students' motivation. Qualitative methods and semi-structured interviews are tools to interpret events according to what people attribute to them (Creswell, 2007, Denzin & Lincoln, 1994). Hen wood & Pidgeon (1995) agree with this viewpoint when they write that the qualitative paradigm tries to find the meaning of what people believe and understand regarding their own experiences. We consider qualitative research an interactive process, where data are the words and opinions of people (Bartlett & Payne, 1997).

Seven interviews with students from the Bachelor's Degree in Business Administration of the University of Girona were conducted in the academic year 2012/2013. Specifically, four female and three male students, aged between 21 and 23 years old, were interviewed. The total number of interviews could seem apparently low, but the restriction in place was that the chosen students had to have necessarily experienced both types of learning. Under this context, we strongly believe it was the perfect and only relevant time to conduct the interviews.

These students had experienced then both types of learning, non-Bologna, known as "Llicenciatura", and Bologna, known as "Grau" (both names are provided in Catalan). They had completed the first year of studies before TBP was implemented and, at the time of this present work, they were completing their fourth and last year of the degree course, a stage when TBP was already set up and running. Therefore, we believed it was a good moment to conduct interviews with such students. These students had the opportunity to compare both types of learning, thus being able to convey their perceptions regarding Feedback.

After conducting a pilot test to improve the first version, the questionnaire was structured in four sets of questions. The first three sets aim at finding empirical evidence of the hypotheses, and the last one, was introduced to obtain more information about the participants and their perceptions. The first set of questions (set 1) aims at finding out whether students have a career goal (long-term goal) and/or academic goals (short-term goals). For this reason, the set was divided into two sections. With the second set of questions (set 2), we wanted to know the students' personal assessment of feedback both before and after the LLL implementation. This set is divided into four different subsets of questions regarding: the existence of feedback; feedback typology; students' assessment of feedback; and a comparison of feedback before and after TBP. The third set of questions (set 3) allowed us to view the evolution of the students' academic performance by analysing their average score in the first year and in the first quarter of the fourth year of their degree.

Set 1 of questions addresses H1, aided by the comparison section of set 3. The second set addresses H2, aided by set 1. Finally, the third set addresses H3, aided by the existence-of-feedback section of set 2.

The last set of questions aims at obtaining additional information of students regarding their work situation and their global perception of the change in their study plans.

4. Findings and Discussion

We have found evidence for the following points, which are summarised in Table 1.

- **Finding 1 (related to H1):**

We have observed that students with specific and challenging goals really have a higher performance than those who have more general or no goals; consequently, there is a relationship between the level of precision/difficulty of the goal and the level of performance. No difference between males and females is observed.

The answers obtained allow us to classify the students into three categories (High, Medium, and Low Case). Students in the High Case have specific and challenging goals and an average score above 8. Medium-case students have general and challenging goals and an average score between 8 and 8.5. Students in the Low Case have general and non-challenging goals and an average score below 8.

- **Finding 2 (related to H2):**

H2 established that students' perception regarding feedback is more helpful in attaining goals for those students who have specific and challenging goals than for those who have general, non-challenging goals or no goals. We have found that for students in the High and Medium Case categories, regardless their gender, and for the male in the Low Case category, feedback is less useful after LLL than before. For the females in the Low Case category, the result is the opposite. This result shows a difference in terms of gender, which needs further research.

- **Finding 3 (related to H3):**

According to H3, students' average score increases as a result of the change in feedback brought about by TBP (LLL). We have found that the implementation of LLL feedback has resulted in an increase in the performance of some students interviewed. Combining this result with the classification obtained in Finding 1 leads us to the main finding of this study:

LLL feedback has resulted in a stronger increase (0.5-2 points) in performance for students in the Low Case category than for students in the other categories, whose performance has not increased (High Case) or has slightly increased (Medium Case).

Table 1: Synthesis of the results

H1			H2	H3
<i>Students with specific and challenging goals have a higher performance than those who have more general goals or no goals</i>			<i>Students' perception of feedback is more helpful in attaining goals for those who have specific and challenging goals than for those who have general, non-challenging goals or no goals</i>	<i>Students' average score increases as a result of the change in feedback brought about by TBP (LLL)</i>
Category of goals	Average score	Categories	Perception of Feedback	Δ students average
Specific* and challenging**	> 8 to 10	High Case	Less useful for all (males and females)	Not Δ
General and challenging	8 to 8.5	Medium Case		Slight Δ
General and no challenging	< 8	Low Case	Less useful for male. More useful for females.	Δ (0.5-2 points)

Source: Prepared by authors.

* Specific: Goals that are a concrete value.

** Challenging: Goal that are specific and involve increasing or maintaining the average score of the students' academic performance.

5. Conclusions and Implications for Future Research

This study gives evidence for the goal/performance relationship stated by the GST (H1), providing a preliminary classification of students, according to the characteristics of their goals and their level of performance. In addition, such classification has been useful in clarifying and structuring the other findings. With respect to H2 and H3, evidence from Finding 2 and 3, respectively, does not agree with the hypotheses. Instead, the results, in some cases, are the opposite of what would have been expected for these hypotheses.

However, the last and main finding of this study provides a different direction in the field of the GST, and so it would need further empirical evidence. For students in the Low Case category, the LLL feedback has meant a large increase in their average score, whereas students in the High and Medium Case categories have seen a slight increase in their average score or no increase at all. We want to emphasize that this research is a qualitative exploratory study. It was conducted under very particular conditions, since it took place when study plans in our institution were changed to adapt old degrees to the new European context: TBP.

We believe that the main finding of this investigation can help to open up a new line of research, not only in the theoretical framework of the GST within the educational context, but also in the introduction of feedback into education and its implications. New lines of research could address, for example, the relationship between the increase in performance and the increase in motivation to perform at a high level. Furthermore, as stated before, the GST is an open theory, so it accepts new contributions to keep widening and developing the theory and its lines of research.

References

- Attard, A., Di Loio, E., Geven, K., & Santa, R. (2010). *Student Centered Learning: an insight into theory and practice*. Bucharest: Education and Culture, GD.
- Bartlett, D., & Payne, S. (1997). Grounded theory-Its basis, rationale and procedures. In G. McKenzie, J. Powell & R. Usher (Eds.), *Understanding social research. Perspectives on methodology and practice*, 173-195. London: Falmer.
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. Thousand Oaks, CA: Sage Publications, Inc.
- Denzin, N. K., & Lincoln, Y. S. (1994). *Handbook of Qualitative Research*. California: Sage Publications, Inc.
- Henwood, K., & Pidgeon, N. (1995). *Using Grounded Theory in Psychological Research*. Lawrence Erlbaum.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.
- Locke, E. A., & Latham, G. P. (2006). New Directions in Goal-Setting Theory. *Current Directions in Psychological Science*, 15(5), 265-268.
- Locke, E. A., & Latham, G. P. (2013). *New developments in goal setting and task performance*. New York, USA: Routledge.
- Locke, E. A., & Latham, G. P. (2015). Breaking the Rules: A Historical Overview of Goal-Setting Theory. In A.J. Elliot (Ed.), *Advances in Motivation Science*, Chapter 4, 99-126.
- Morgan, R. E., & Baker, F. W. (2012). Developing a Conceptual Framework for Motivation of Professional Educators According to Content and Process Theories. In P. Resta, (Ed.), *Proceedings of society for information, technology and teacher education international conference 2012*. Association for the Advancement of Computing in Education. Austin, Texas, USA. March 5, 1216-1221.
- Weimer, M. (2002). *Learner-Centered Teaching: Five Key Changes to Practice*. San Francisco, CA: Wiley, John & Sons.