PROCESS OF CREATING A QUESTIONNAIRE TO ANALYZE TEACHER’S FEEDBACK: EXPERTS PANEL RESULTS

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Abstract

One of the tasks made by university teachers is to provide feedback to students about their performance in a variety of assignments. Feedback is a process of key importance in the teaching activity, which has resulted in numerous research efforts to ensure their optimization. This will become a central task when tutoring students during master dissertation period. Consequently, the main aim of the present study is to define items of an instrument for the self-diagnosis of feedback provided by the teachers during the dissertation module of a master program.

Based on the seven principles of Nicole and MacFarlane model (2006), a list of 165 items was redacted. Content validity of the items was determined by testing experts, eight tutors participated by evaluating each item according to three criteria: (a) relevance, (b) suitability and (c) clarity of the item. The analysis concluded in 72 items, which will compose a first version of questionnaire.

Instruments are fundamental tools, not only in research, but also in an educational context. A necessary instrument for professional practice would be one that would serve to evaluate the quality of feedback offered by tutor. Research is presented in this line.

Keywords: Feedback, master program, questionnaire, tutor, validation.

1 INTRODUCTION

The current Higher Education Area focused on quality university education aims to evaluate the key competency of teacher feedback to help self-regulated student learning and formative assessment. We should not forget that this is directly related to the successful adaptation of the student in the professional and social field. One of the tasks made by university teachers is to provide feedback to students about their performance in the different assignments. We can define, therefore, university tutoring as “an activity of formative nature that affects the integral development of university students in their intellectual, academic, professional and personal dimension”\(^1\). Feedback is a process of key importance in the teaching activity, which has resulted in numerous research efforts to ensure their optimization. This will become a central task when tutoring students during master dissertation period.

In order to guarantee better master thesis, tutors should offer personalized and formative feedback\(^2\). Echevarría\(^3\) conceives university tutoring as “the activity of the tutor teacher is aimed to foster a permanent maturation process. Through which the university student is able to obtain and process correct information about himself and his environment. Using intentional approaches to reasoned decision making; to integrate a constellation of factors that will shape their life trajectory; Strengthening their self-concept through vital experiences in general and in particular work; Deploying particular skills and precise attitudes, in order to integrate work within a project of global life”. This definition is not just centred on academic development, but it also underlines professional and personal levels.

Focusing on feedback, some studies have examined different types of feedback provided by tutors to students. According to research literature, there are various forms to provide information on performance of a student. Some authors distinguish among formative and summative feedback. It is clear that summative feedback is a process of assessment that leads to a summative assessment, a judgement that encapsulates all the evidence to a given point. This point is seen as a finality at the point of the judgement. A summative assessment has various functions, which do not impinge on the process. On the other hand, formative feedback as a process of assessment following Scriven’s notes\(^4\), it is single process, i.e. making a judgement according to standards, goals and criteria. In addition, for an assessment to be formative, it requires feedback which indicates the existence of a
‘gap’ between the level of the work being assessed and the required standard. It also requires an indication of how work can be improve to reach the required standards.\(^5\)

Literature also offers some key guidelines for lectures: being specific, timely, focusing on the attainable, encouraging thinking, dialogue, motivation and information.\(^6\) According to students, the main types of feedback used by tutors are verbal comments (individual: tutor - student) and generic comments (group: tutor - class). The first method is the most preferred by students, which clearly involves more teaching resources (i.e., time dedication, etc.).\(^7\)

On the other hand, some research has focused on analyzing contents of the feedback rather than its format. Barrios\(^8\) pointed out, that there are two types of feedback: emotional and the cognitive. First, one refers to those messages whose purpose is to provide emotional support and promote security and self-confidence on the students. On the other hand, cognitive feedback consists in providing a series of specific messages on the subject helping “student who receives those comments to reach complex and high levels of reflective thinking”. In his study, he found that most parts of comments were cognitive feedback, with a lower proportion of those aimed to an emotional function.

Other authors refer to “constructive feedback”. Richards, Bell and Dwyer\(^9\) highlight that exists three key factor that makes feedback constructive: (a) focus on content rather than on format; (b) timely and (c) and not about the student, but task driven oriented.

Going beyond types of feedback and self-regulated learning, Nicol and MacFarlane\(^10\) presented a framework of seven principles on methods and techniques, in order to provide a conceptual model about the nature of feedback, to promote self-regulated learning. Their model describes components and processes involved in creation of a self-regulated learning, characterizing elements that should be present in the feedback to promote it.

These principles are: (1) clarify what good performance is; (2) facilitate self-assessment; (3) deliver high quality feedback information; (4) encourage teacher and peer dialogue; (5) encourage positive motivation and self-esteem; (6) provide opportunities to close the gap; and (7) use feedback to improve teaching (see Table 1). Their work is based on the assumption that feedback should strengthen students’ capacity of self-regulate their own performance and contribute to their ability for long-term learning. As shown, this model integrates both cognitive and emotional feedback. At the same time, it strives to be constructive in the process of student’s learning.

Table 1. The theoretical model of Nicole and MacFarlane (2006) with seven principles and their subcategories of good feedback practice.

<table>
<thead>
<tr>
<th>Principle</th>
<th>Subcategories</th>
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<tr>
<td>1. Clarify what good performance is:</td>
<td>Providing better definitions of requirements using carefully constructed criteria, sheets and performance level definitions. Providing students examples of assignments with attached feedback; increasing discussion and reflection about criteria and standards in class; involving students in assessment exercises where they mark or comment on other students' work in relation to defined criteria and standards. Workshops where students in collaboration with teacher devise their own assessment.</td>
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<td>2. Facilitate self-assessment:</td>
<td>Requesting the kinds of feedback, they would like when they hand the work; identifying strengths and weaknesses in their own work in relation to criteria or standards before handing it in for teacher feedback; reflecting on their achievements and selecting work in order to compile a portfolio.</td>
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<td>3. Deliver high quality feedback information:</td>
<td>Making sure that feedback is provided in relation to pre-defined criteria but paying particular attention to the number of criteria. Providing feedback soon after a submission; providing corrective advice not just information on strengths/weaknesses; limiting the amount of feedback; prioritizing areas for improvement; providing online tests so that feedback can be accessed anytime, anyplace and as many times as students wish; focusing on students with greatest difficulties.</td>
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<td>4. Encourage teacher and peer dialogue:</td>
<td>By providing feedback using one-minute papers. Reviewing feedback in tutorials where students are asked to read feedback comments they have been given and discuss these with peers (they might also be asked to suggest strategies to improve performance next time); asking students to find one or two examples of feedback comments that they found useful and to explain how useful they were. Other ways of using feedback dialogue in a planned way, for assignments, might involve: (1) proposing students to give each other descriptive feedback on their work in relation to published criteria before submission; (2) group projects.</td>
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<td>5. Encourage positive motivation and self-esteem:</td>
<td>Providing marks on written work only after students have responded to feedback comments; allocating time for students to re-write selected pieces of work – this would help change students’ expectations about purpose; automated testing with feedback; drafts and resubmissions.</td>
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6. Provide opportunities to close the gap: to increase the number of opportunities for re-submission; for teachers to model strategies that might be used to close a performance gap in class (e.g. a model of how to structure an essay when given a new question); teachers might also write down some 'action points' alongside normal feedback provided. This would help students to identify what they should do next time to improve their performance; a more effective strategy might be to involve students in identifying their own action points in class based on just received feedback. This would integrate process into a teaching and a learning situation involving students more actively in the generation and planned use of feedback.

7. Use feedback to improve teaching: one-minute papers where students carry out a small assessment task and handing this feedback anonymously at the end of a class (e.g. what was the main point of this lecture? What question remains outstanding for you at the end of this teaching session?). Having students to request feedback they would like when they make an assignment submission. Having students to identify where they are having difficulties when they hand assessed work; asking students in groups to identify 'a question worth asking', based on prior study, that they would like to explore for a short time at the beginning of the next tutorial; quick evaluation strategies at key points in teaching.

According to this model, the center of the self-regulated learning is the student, who builds knowledge in an active way, step by step analyzes his own mental representations, being the last responsible to realize that their experiences and learning process make sense. In this model, teacher ceases to be protagonist to become the one that orients and guides learning. The main purpose is that construction of knowledge by students is progressively approaching what contents signify and represent.

Consequently, the main aim of the present study is to create items of an instrument for self-diagnosis of the feedback provided by the teacher during dissertation module of a master program. To do this, the model of Nicol and MacFarlane was followed. As a secondary aim, it is intended to analyze and validate the wording of the items.

2 METHODOLOGY

2.1 Participants

Initially, 23 Spanish specialists were invited to join a panel of experts, although the sample was finally reduced to eight participating voluntarily and anonymously. Choice of participants was based initially on a non-probabilistic sample in which those professionals who were easily contacted and who represented tutors population of external practices at masters’ studies of the University of Barcelona were considered. Characteristics of final sample of seven experts were as follows: there were 5 women and 2 men. The master’s degrees are related to the areas of knowledge of psychology, education and law.

Two criteria were used to select the group of experts: (1) a minimum of 3 years of experience as a tutor in the external practices of a university master’s degree, and (2) tutors should have practical and theoretical knowledge related to the feedback.

2.2 Procedure

Guidelines recommended by Abad, Olea, Ponsoda and García were followed to elaborate the first version of the questionnaire to evaluate the good practices of feedback of the tutors of master’s degree. Following the process, and based on Nicol and MacFarlane (2006) model of feedback, a set of items was created that considers behaviors related to the 7 principles and 31 subcategories included in the mentioned model. To that end, we tried to ensure that their content was as precise and clear as possible, as advised by Haladyna, Downing and Rodriguez. In addition, an attempt was made to write more than two items for each subcategory.

After creating the set of items and reviewing them, they were sent to the experts through a Google form created for this purpose (see Table 2 example of items by dimensions). Link to this form was sent via email. At the beginning of the form, instructions that the experts had to follow to respond adequately were inserted. In this case, experts were asked was to evaluate content validity of the 165 items. Taking into account the following criteria and the range of response: (a) Relevance: if the item assesses what to evaluate (scale: 1-9, where 1 is irrelevant and 9 is very relevant); (b) Suitability of the item: measuring to what extent item fits the theoretical dimension where is located (scale: 1-9, where 1 not suitable and 9 is very suitable); (c) Clarity of the item (scale: 1-9, where 1 not
understandable and 9 is very understandable). The questionnaire also included a last section to collect additional comments or observations from the judges.

Each expert was given a period of fifteen days to enable him/her to carry out evaluation and also to be able to send his/her answers to the electronic address enabled for this purpose.

Once we received all the answers, they were stored in an Excel sheet, and the results were analyzed.

Table 2. Examples of items by principles

<table>
<thead>
<tr>
<th>Principle</th>
<th>Example of item</th>
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<tbody>
<tr>
<td>1. Clarify what good performance is</td>
<td>Clear explanation of tasks for each phase and how to implement them.</td>
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<tr>
<td>2. Facilitate self-assessment</td>
<td>To ask student which kind of feedback suits them better to improve his learning process</td>
</tr>
<tr>
<td>3. Deliver high quality feedback information</td>
<td>Provide student with feedback to help improve weaknesses to potentiate strengths focusing on final result to achieve-</td>
</tr>
<tr>
<td>4. Encourage teacher and peer dialogue</td>
<td>To organize group sessions where students are in charge of giving feedback to each one of their fellow students, based on evaluation criteria</td>
</tr>
<tr>
<td>5. Encourage positive motivation and self-esteem</td>
<td>Encourage student in his work.</td>
</tr>
<tr>
<td>6. Provide opportunities to close the gap</td>
<td>Given the opportunity to present various drafts versions of his work, showing improvements made to achieve expected result.</td>
</tr>
<tr>
<td>7. Use feedback to improve teaching</td>
<td>Ask students about the kind of feedback they need to be able to improve their work.</td>
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3 RESULTS

In general, data shows that none of the items has received a 1 as a minimum score in relevance, neither suitability or clarity. In the case of the relevance criteria, minimum score was 2 (3 items) and the highest, 9 (138 items); suitability and clarity, the minimum score was 3 (22 suitability and 16 clarity items) and maximum score was 9 (129 suitability and 146 clarity items). However, most of the scores awarded have been in the range of high scores (from 7 to 9) of relevance, suitability and clarity.

The average of scores assigned by experts to each of the items were calculated taking into account the three criteria that guided the evaluation. The results are shown in Figure 1. As it can be seen, most of the items obtained scores averages that were between 6 and 9 points.
Figure 1. Distribution of items according to average of scores assigned by experts

From the scores obtained in the score range from 7 to 9, and taking into account the theoretical model composed of 7 principles and 36 categories, 93 items were eliminated from the initial 165 items, leaving a total of 72 items: two items for each of the subcategories. Observing scores of these items and having revised the written ones, an improvement of answers has been made, concluding that these items are more adapted to the content of the categories to which they belong.

4 CONCLUSIONS

Research has focused on the importance of feedback within the learning process of students as independent beings, able to monitor, evaluate and regulate their own learning. In this sense, feedback has been considered as the information that is offered to the students on their current learning, in order to help them to detect distance between realized learning and objectives that are intended to be achieved. To achieve these objectives it is necessary to know if feedback provided by tutor to the students is focused on all the behaviors that must be performed to carry out a good feedback.

As a proposal to carry out this evaluation, development and validation of a questionnaire based on the Nicole and MacFarlane seven principles model is presented. Although this is a first stage of elaboration, the questionnaire has been considered by the experts as a valid tool to be used in evaluation of teaching practices related to feedback.

This contribution must be qualified, given the limitations of the research. The main limitation relates to the relatively high number of items. This fact makes difficult a higher number of experts implied in the evaluation. Additionally, disciplines of origin of experts also were limited. Further work is needed to complete the validation process of the questionnaire.

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REFERENCES


