Practices and conceptions of feedback in initial teacher training

Gloria Contreras Pérez
ORCID: 0000-0002-3813-515X
Carmen Gloria Zúñiga González
ORCID: 0000-0001-6031-9687

Abstract

This article presents the results of a research project that aimed at characterizing the feedback given by professors to their students in relation to their academic assignments and at understanding the conceptions related to those practices. The research was conducted in an Initial Teacher Training program imparted by a private university in Chile. The research approach is qualitative-interpretative and had as participants four professors of different subjects and students enrolled in each of those subjects. For this purpose, non-participant observation was carried out, while professors were given feedback to marked assignments, document analysis was conducted to those marked assignments, each professor participated in a semi-structured interview, and a focus group was held with their students. Results showed that there were differences in the underlying conceptions of the participants, which lead to different feedback styles, such as confirmatory, corrective, achievement and learning-oriented, and focused on missing points. Therefore, it could be inferred that professors’ feedbacks were understood in some cases as a mere correction of tasks and pointing out unachieved learning goals, while in others as projective improvement and as an open space for dialogue. These last two were the most valued kind of feedback by the students. Thus, this positive assessment emphasizes the need to include feedback as part of the curriculum of Initial Teacher Training programs to provide a formal framework for giving useful and enriching feedback to students.

Keywords


1- This research was funded by Comisión Nacional de Ciencia y Tecnología de Chile (CONICYT), project number FONDECYT 1161514, Concepciones y prácticas de retroalimentación de profesores de Pedagogía Básica. Relaciones con su aprovechamiento pedagógico.

* Translation of this work was performed by Mason Taylor. Contact: davemasontaylor@gmail.com

2- Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile. Contact: gloria.contreras@pucv.cl.

3- Pontificia Universidad Católica de Chile, Santiago, Chile. Contact: carmen.zuniga@uc.cl.

DOI: http://dx.doi.org/10.1590/S1678-4634201945192953

This content is licensed under a Creative Commons attribution-type BY-NC.
Introduction

Numerous studies on assessment of learning and education, and particularly feedback, have shown that these processes may positively impact learning at all study levels, including higher education (BLACK; WILIAMS, 1998; BIGGS, 2007; DOWDEN et al., 2013; EVANS, 2013; HIGGINS, HARTLEY; SKELTON, 2002; LI; DE LUCA, 2014; PRICE et al., 2010; HATTIE; TIMPERLEY, 2007; THOMSOM; FALCHIKOV, 1998). Despite its recognized importance worldwide, feedback and its impact on student learning has been little studied in the Latin American context (CONTRERAS-PÉREZ; ZÚÑIGA-GONZÁLEZ, 2017; 2018). In the case of Chile, the Sistema de Evaluación del Desempeño Profesional Docente (Professional Teacher Performance Evaluation System) reports the lowest scores, year after year, are for professor feedback, regardless of subject or study level (CHILE, 2016). If one considers that professors submit only their most flattering pedagogical practices to the Evaluation System, representing their best efforts, then there must be serious problems in the feedback practices of Chilean professors. These results are a clear bellwether of shortcomings in initial teacher training programs, not just in the programmatic contents of their respective curricula, but also likely stemming from the feedback practices of teacher trainers themselves, on whom students model their future professional actions.

Given the above lack of information in Chile, this study contextualizes feedback from the perspective of educational assessment of learning and its influence on student professional development and has designed research to analyze professor and student feedback practices and conceptions in Initial Teacher Training Programs at three different universities in the Fifth Region of Chile. This article describes the results from one of these universities, where the guiding research question was: What are the characteristics of the feedback given by professors to their students when they return coursework, and what are the underlying conceptions of these practices?

Hereafter, the term “professor” is used to refer to university professors; the term “student” is used to refer to the university student who will be a teacher in the future; and the term “teacher” is used to designate the education professional who works in the school system.

The context of teacher training in Chile

In Chile, the quality of education, and specifically initial teacher training, has been a matter of great national concern since the return to democracy in 1990. From that year onwards, there have been many initiatives to improve it, including resources for teacher training institutions and scholarships for outstanding students (AGENCIA DE CALIDAD DE LA EDUCACIÓN, 2015). There are currently 52 universities that train teachers, with various public policies to ensure the quality of this training. In that sense, only accredited universities and respective accredited training programs (ÁVALOS, 2014) can offer pedagogical careers. Disciplinary and pedagogical training standards have been drawn up to guide teacher training, and future teachers must demonstrate knowledge of these upon graduation (ÁVALOS, 2014). However, to date, there is a gap between teacher training institutions and the school system (GAETE; GÓMEZ; BASCOPÉ, 2016),
which specifically translates into shortcomings such as the difficulty of designing and implementing pertinent evaluation processes whose results may provide feedback to students (RODRÍGUEZ et al., 2014).

In this regard, two recent learning assessment studies (AGENCIA DE CALIDAD DE LA EDUCACIÓN, 2016; GYSLING, 2017) provided some insight into initial teacher training and feedback. Both conclude that, while students understand the importance of feedback in the training process, the excessive theorization lacks practical applications. Compounding the issue, these studies focus on the behavioral aspects of feedback, such as correction and enunciation of error from teaching-centered perspective, and not on student learning.

The concept of feedback in learning assessment

The term feedback refers to a process of communication and adjustment of results. Paraphrasing Ramaprasad (1983), feedback is information about the gap between a reference state and a desirable state, which is used to close that gap.

The concept is used in various disciplines and with different meanings. There is no agreement on a unified concept in the field of education, partly because for some authors it is associated with evaluation processes, and so is considered post-teaching (HATTIE; TIMPERLEY, 2007); for others it is part of teaching itself (EVANS, 2013); and, in many studies it is treated as a process specifically linked to grade-based evaluations (BAILEY; GARNER, 2010; BROWN; HARRIS; HARNETT, 2012; CARLESS, 2006; DIXON; HAIGH, 2009; GRAINGER; PURNELL; ZIPF, 2008; HARMAN; MCDOWELL, 2011; JODAIE; FARROKHI; ZOGHI, 2011; ORSMOND; MERRY, 2011; ORRELL, 2006; TANG; HARRISON, 2011).

However, there is agreement that, in a broad sense, feedback can be understood as a process of communicating information about student performance to the student (HATTIE; TIMPERLEY, 2007). In order for feedback to have positive effects, Sadler (1989) points out that the student must have a concept of the standard (reference level or goal); be able to compare their current level of performance with that standard; and be committed to appropriate action that leads to some closing of the gap between these levels of performance. Sadler (2010) adds that any of the numerous procedures used to communicate to a student whether the answer to a question is correct or incorrect, e.g. test scores, notes, symbols and words, cannot be considered feedback.

From a socio-constructivist perspective, Evans (2013) stresses that feedback includes all exchanges generated in the assessment process, which occur within and outside the immediate learning context, which may or may not be explicitly requested, and which come from a wide range of sources. This definition emphasizes the dynamic and social nature of learning, highlighting not only the nature of feedback, but also the means by which it is produced, distributed, and received. This framework sees feedback as a process of dialogue whose source of information is not only the professor, but also another agent, such as peers. For example, Wiliam (2009) proposes encouraging students to act as resources for each other in evaluating their work.

In the practice of feedback, two stages can be distinguished (MAURI; BARBERÀ, 2007). First, in communicating information to students, the information must be
understood by the students and, therefore, the professor must think about the way in which they receive, codify and interpret this information. In this way, information must be delivered in a clear and shared language, and if they are written comments, they must be legible and spatially well-located. This implies a shared understanding of the meaning behind numbers, letters, X-marks, checkmarks, and the concepts and processes involved (Murphy; Cornell, 2010). Understanding communication is only one aspect of feedback. It is also necessary for the student to value and make use of feedback with the purpose of improving their learning; hence, the second stage is sometimes referred to as achievement (Mauro; Barberà, 2007). Both stages can be deployed in different ways depending on the number of students, time available, content and skills assessed, type of errors made, level of courses, among others.

This research considers feedback a process of dialogue that the professor initiates based on having applied an evaluation procedure and providing results to students, which involves the delivery of comments and varied suggestions, with the purpose of helping them to recognize errors and correct them, thus developing self-evaluation and monitoring skills. This requires that the professor have previously-established evaluation criteria and standards and has communicated them to students; that they have designed and implemented an adequate system to collect information about learning; and that they have strategies to communicate this information and ensure that students may make use of it to improve (Black; Wiliam, 1998; Blair; McGInty, 2012; Draper, 2009; Dowden et al., 2013; Havnes et al., 2012; Long, 2014; Orsmond et al., 2013; Sadler, 1989; Wiliam, 2011).

Categories of feedback

Available literature in the field provides some useful classifications for analyzing feedback practices and the conceptions that guide them. Table 1 below presents those that are most appropriate for the type of study conducted.

Table 1- Categories of feedback

<table>
<thead>
<tr>
<th>Types of Feedback</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluative feedback</td>
<td></td>
</tr>
<tr>
<td>Reward</td>
<td>Smiley faces</td>
</tr>
<tr>
<td>Punishment</td>
<td>Sad faces</td>
</tr>
<tr>
<td>Approving</td>
<td>“Well done.”</td>
</tr>
<tr>
<td>Disapproving</td>
<td>“You could do better, but you’re too lazy.”</td>
</tr>
<tr>
<td>Confirmatory</td>
<td>Checkmarks or crossing out</td>
</tr>
<tr>
<td>Corrective</td>
<td>“The answer is 4.”</td>
</tr>
<tr>
<td>Achievement oriented</td>
<td>“You have correctly identified the divisors.”</td>
</tr>
<tr>
<td>Gap Oriented</td>
<td>“You were wrong about the sign.”</td>
</tr>
<tr>
<td>Learning Oriented</td>
<td>“Why do you think you were wrong?”</td>
</tr>
<tr>
<td>Designing Pathways to Learning</td>
<td>“How do you think you can improve?”</td>
</tr>
</tbody>
</table>

Source: author. Based on studies by Hattie & Timperley, 2007; Li & Barnard, 2011; Orsmond & Merry, 2011; Tunstall & Gipps, 1996.
Conceptions of feedback

Conceptions are teacher assessments that act as a filter. They help the teacher make certain educational choices. Conceptions are made up of both professional knowledge and beliefs. Professional knowledge includes pedagogical knowledge, professional criteria, and explicit theoretical arguments, constructed in initial and continuous teacher training and from the different experiences of their professional development. Beliefs, on the other hand, are mental constructions valid for particular actors, though not necessarily consensual to be considered valid; neither do they require a condition of contrasted truth, nor do they require logical rules to determine their correspondence with reality (PRIETO; CONTRERAS, 2008).

Based on a review of research in this regard, Contreras-Pérez and Zúñiga-González (2017) classified the conceptions of professors into the following categories:

- Feedback understood as task correction: Here, feedback is a process in which the student is informed on their successes and (especially) mistakes through symbols, signs, X-marks, checkmarks and scores. It has evaluative, specific and retroactive characteristics; that is, this type of feedback identifies the errors made in a previous task (BAILEY; GARNER, 2010; HARRIS; IRVING; PETERSON, 2008; LI; BARNARD, 2011; LONG, 2014; JODAIE; FARROKHI & ZOGHI, 2011; ORSMOND; MERRY, 2011; TANG; HARRISON, 2011). As a practice, it is used especially by university professors in written works to communicate, explain and justify the assigned grade, not only to their students, but also to themselves and their superiors;
- Feedback understood as praise: This is evaluative, positive feedback directed to the students’ ego. Its purpose is to promote positive feelings and commitment to study, especially in students who find it more difficult to obtain good results (BURNETT & MANDEL, 2010; HARRIS, IRVING & PETERSON, 2008; NELSON & SCHUNN, 2009). As a practice, it does not lead to improved learning because it addresses student perceptions of themselves and not their performance on the task (STOBART, 2006). However, it is one of the most used at any study level;
- Feedback understood as projected improvement: This conception focuses on elements of student meta-cognition, such as monitoring and evaluating strategies used. As a practice, it is characterized by comments, written, virtual, but preferably oral, that may occur during the development of some work or at the end. The sense that professors give to this modality is eminently formative and projective, since they expect students to improve on future work. In this case, feedback should rather be focused on general skills (JONSSON, 2013), and on what they need to improve, rather than on how well they have done it (WILIAM, 2009).

Methodology

The present research is set within a qualitative and interpretative framework, particularly making use of an exploratory-descriptive methodology (CHARMAZ, 2014). This was applied to the first phase of the Regular FONDECYT project in analyzing
feedback processes in university classrooms training primary education professors in the Fifth Region of Chile. The methodology below was thus designed to characterize the feedback given by professors to their students when returning coursework, and to record the conceptions underlying such practices. Four sources of information were considered for this task: observation of the return of graded coursework, evaluation procedures for correction, semi-structured interviews with professors who gave feedback, and a focus group with students from the observed courses who voluntarily agreed to participate in the study. These data collection activities were recorded in audio, prior informed consent of the participants, and subsequently transcribed for analysis, following (FLICK, 2009).

The methodology takes an in-depth understanding of contemporary phenomena in the context in which they occur. Below, we describe how initially-analyzed information, as independent units, were later triangulated among each other and with previously defined theoretical explanations (SALDAÑA, 2016), such as feedback typologies (GIBBS, 2012). The characteristics of the process of collection and analysis of the different sources of information used are as follows, and coding and subsequent categorization made use of Nvivo 11 software.

**Study subjects**

**Primary Education Program, Students**

Participants in this category were students enrolled in the penultimate year of their program. This level was chosen because the students of these courses have already experienced feedback from their professors for years and, therefore, have conceptions formed throughout their university careers (LONG, 2014). Students in their last year were not included, since they have an extensive final practicum where students are mostly outside the university. All students gave their permission to observe the classes and most attended the focus group.

**Primary education program, professors**

These are the professors who teach classes in the penultimate year of the program, as characterized above. An e-mail was sent to seven professors requesting their participation, and four accepted.

**Observation of graded work returned to students**

After establishing contact with, and obtaining consent from, the administration of the General Primary Education career, the third-year courses from four subjects were observed. In these courses, feedback on written work was observed, making note of the oral comments made by the professors on the matter, the remedying actions they suggested, and the way in which the students received their work and comments. For observations of
graded coursework returned to students, an observation guideline was structured around the following dimensions: *Context, communication of results, and use of results.*

Information from each observation was the object of a descriptive analysis to characterize: types of evaluation procedures; recipients of feedback communication, like group, small groups, and individual; modality of communication, e.g., written, oral, gestural; focus of communication; and actions and judgments issued by the professor. A set of codes based on the feedback categories was then applied to this information. Two collaborating researchers independently coded the feedback activities for subsequent review by the team, resolving discrepancies and generating emerging codes.

**Evaluation procedures for correcting coursework**

Each professor was asked to provide copies of their assessment procedures for coursework receiving good, fair, and poor grades. An analysis guideline was applied to these documents in order to gather information about the feedback modalities present. The dimensions of analysis of the guideline were: *Characterization of the evaluation procedure, Description of symbols,* and *Description of written comments.*

**Professor interviews**

Observed professors were asked to participate in a semi-structured individual interview in order to understand their perceptions on oral and written feedback practices; and to gain insight into the underlying conceptions, with emphasis on the perceived benefits and difficulties for student learning. Each interview was recorded and then transcribed for analysis. Once transcribed, codes were established based on predefined feedback typologies and emerging themes, and information was classified into categories. As the information grew, categories were refined, and relationships were established among them.

**Student focus groups**

Focus groups were carried out with students who had been observed in order to investigate their conceptions about feedback and the perceived benefits and difficulties for their learning. First, they were individually asked to provide written answers to guiding questions related to the concept of feedback, their uses, degree of satisfaction with the information provided by the feedback, and its impact. This information, among other aspects, was later used to reflect upon and share their ideas with the group.

Second, each participant was given a fictitious essay-type test consisting of three pages, with four different feedback configurations (showing differences in symbols and type of comments), prepared by the research team beforehand, following (ROBINSON, POPE & HOLYAK, 2013). The students were asked to read and analyze the feedback from the tests and then provide their comments on the quality of the feedback and its possible effects on learning.
Results

Feedback practices

In characterizing the modalities of graded work returned to students, we highlight the use of feedback in specifying what is missing (gap-oriented), in denoting correct and incorrect answers (achievement-oriented), and in building learning (learning-oriented). Once the type of preferential feedback was identified, a global characterization of the type of feedback offered by professors was made (Table 2).

Table 2- Type of feedback provided by professors

<table>
<thead>
<tr>
<th>Professor</th>
<th>Purpose of the activity</th>
<th>Focus or Content</th>
<th>Audience</th>
<th>Timing and duration</th>
<th>Preferred feedback type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Understand poor results. Support learning not demonstrated by correcting mistakes.</td>
<td>Mathematics and mathematics education contents.</td>
<td>Class Group, individual and couples.</td>
<td>The whole block of classes. 1 hour and 20 minutes.</td>
<td>Gap- and learning-oriented</td>
</tr>
<tr>
<td>2</td>
<td>Communicate results and correct mistakes.</td>
<td>Content of the test.</td>
<td>Class Group</td>
<td>At the beginning of the class. 30 minutes</td>
<td>Corrective</td>
</tr>
<tr>
<td>3</td>
<td>Support learning not demonstrated and support future work.</td>
<td>Reading and reading education contents.</td>
<td>Mainly Class Groups, also pairs or individually.</td>
<td>After student presentations. 1 hour and 5 minutes.</td>
<td>Learning- and gap-oriented.</td>
</tr>
<tr>
<td>4</td>
<td>Correct mistakes and support learning.</td>
<td>Content of the test and formal aspects of structure.</td>
<td>At the beginning, to the class group, then individually.</td>
<td>At the beginning of class. 1 hour and 6 minutes.</td>
<td>Gap-oriented.</td>
</tr>
</tbody>
</table>

Source: author.

The professors had a variety of ways of providing feedback to students, though common characteristics emerged. First, every professor communicated the purpose of the feedback activity, and although in some cases this purpose may not be very clear, it had a marked beginning, development, and closure. The activity was preferentially placed at the beginning of the class, ranging from half an hour to an hour and twenty minutes, directed either at the whole course, small groups, or individually; and focused on the content of the assessment. None gave negative feedback, and there was almost no disapproval.

Feedback interventions were mostly classified as descriptive (62%) and ranged from specifying errors to orienting future work through questioning. The remaining 38% of feedback was evaluative, that is, only indicating whether work is good or bad, rather than indicating the desired response needed to pass. It should be noted that this latter modality was most developed by a single professor.
Evaluation procedures for correcting coursework

Below (Table 3), we summarize the characteristics of the revisions made by each professor on student tests or papers, according to the analysis guideline. It should be noted that no differences were found in the feedback if the grade was good, regular, or insufficient.

**Table 3- Professor reviews of student tests or papers**

<table>
<thead>
<tr>
<th>Characterization of written feedback practices</th>
<th>Symbology used in the correction and its meaning</th>
<th>Comments and their meaning</th>
<th>Types of feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subject-matter and evaluation procedure applied</strong></td>
<td><strong>Professor 1</strong></td>
<td><strong>Professor 2</strong></td>
<td><strong>Types of feedback</strong></td>
</tr>
</tbody>
</table>
| Mathematics. Written test, 5 problems. | - Check marks, X marks, checks with a line through them, to indicate that something is good, bad, or moderately good.  
- Circles around some mistakes.  
- Underlined text, to show that something is wrong or incomplete, leading to a comment.  
- Question marks, to indicate that something is not understood.  
- Questions scored to indicate assessment.  
- There is no total score or grade. | - Brief and specific questions on missing aspects. For example: “Name of the graph?”  
- Indications for the answer to be completed. For example: “expand on the amount of time needed”. | Symbols and comments well placed, legible and well written. Feedback directed specifically to the work. No judgment on student personality or comments of disapproval.  
According to the typology, this indicates feedback that is:  
- Confirmatory,  
- Corrective, and  
- Gap-oriented. |
| Child care. Written test, 14 multiple-choice questions and seven short answer. | - Check marks, X marks, to indicate that something is good or bad.  
- Circles enclosing the correct answer.  
- Arrows whose purpose is to lead to a comment.  
- Question marks, to indicate that something is not understood.  
- Strikethrough or underlined text, to show that something is wrong or incomplete, leading to a comment.  
- Questions scored, total score, and grade to indicate the evaluation. | - Comments on or under the student’s response, completing it. For example, “...an increase in TSH”.  
- Strikethrough text and comments over or under the student’s response, placing the appropriate response. For example, “Complications from mumps”. | Symbols and comments well placed, legible and well written. Feedback directed specifically to the work. No judgment on student personality or comments of disapproval.  
According to the typology, this indicates feedback that is:  
- Confirmatory, and  
- Corrective. |
### Professor 3

**Reading Applied reporting: analysis of a practical case.**
- The report was turned in virtually, and so revisions were made in Word.
- No X marks or checkmarks present, nor scores or grades.
- Crossed-out text, meant to eliminate.
- Red Text, to indicate some typing error.
- Comments or questions to complete some aspect. For example, “point to the course of inquiry” and “What are the students doing?”
- Specific comments that indicate what should not be done and why. For example, “Avoid value judgments” and “This report does not require contextualization of the IEP...”.
- Questioning actions. For example, “Just looking? Not analyzing or reflecting?”
- Concluding comments pointing out what is good about the report and what needs to be improved. For example, “The structure is adequate in its form, as it presents the three basic elements.”; “Improve the quality of the description”.

Feedback directed to the work, mostly specific, but sometimes general; feedback is retroactive and at times proactive. Although there are no judgments on student personality or comments of disapproval, words or phrases are eliminated.

According to the typology, this indicates feedback that is:
- Corrective.
- Disapproving.
- Gap-oriented.
- Achievement-Oriented
- Learning-Oriented

### Professor 4

**Research Methodology**

**Written test: two open questions**
- Check marks, X marks, checks with a line through them, to indicate that something is good, bad, or moderately good.
- Strikethrough text to show that something is wrong or incomplete (spelling mistakes or misused concepts).
- Question marks, to indicate that something is not understood.
- Circles with capital letters P or H, which refer to comments at the end of the answer sheet.
- Circles containing words or phrases to indicate that comments are being made.
- Arrows intended to lead to a comment.
- Score by question, total score, and grade to indicate the evaluation.
- Comments made on the margin of the sheet or on the student’s text. They refer to erroneous or incomplete aspects, for example, “Cite the text when appropriate” and “Associate with experience”.
- Comments at the end of each of the two responses that indicate which aspects were achieved and which were not, including congratulations and general suggestions such as “Focusing and deepening”. Some form of the above were included after each question.

Feedback is work-directed, specific, proactive and retroactive. Contains positive comments and no disapproving comments.

According to the typology, this indicates feedback that is:
- Confirmatory,
- Achievement-Oriented
- Gap-oriented.

### Professor perceptions

Participating professors noted that they have not undergone general feedback training. Rather, the practice is novel, and only in the last decade has it been integrated into the Initial Teacher Training programs. With respect to preferential timing and preferred feedback modality, there is no agreement between them, and feedback may be oral or written, and take place at the beginning or end of the class; in short, that feedback processes are here related to the way teaching is planned and the personal characteristics of the professor. Regardless, observations did show that professors perceive that their feedback positively affects student learning. Professors also agreed that feedback is necessary to monitor learning, but time and the large number of students make the task difficult. The type of feedback coded from participant responses suggest that feedback is evaluative and descriptive, with variations in each professor, as shown in Table 4.
Table 4- Perceptions of feedback from participating professors

<table>
<thead>
<tr>
<th>Prof.</th>
<th>Previous Feedback training</th>
<th>Preferred timing for Feedback</th>
<th>Preferred Recipient and modality</th>
<th>Use of feedback as learning process</th>
<th>Definition of feedback</th>
<th>Type of feedback declared</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not in feedback, though did have graduate training in evaluation</td>
<td>End of class</td>
<td>Entire class Oral</td>
<td>Inversely proportional to the size of the course and proportional to the interest of the student.</td>
<td>Possibility of verifying if what has been taught has been taken advantage of by the students and if the learning obstacles have been eliminated.</td>
<td>Confirmatory Corrective Achievement-Oriented Gap-Oriented</td>
</tr>
<tr>
<td>2</td>
<td>None</td>
<td>Class start</td>
<td>Entire class Oral</td>
<td>Depends on student motivation</td>
<td>Opportunity to reaffirm concepts and correct mistakes</td>
<td>Confirmatory Corrective</td>
</tr>
<tr>
<td>3</td>
<td>Non-formal, through experience and practice</td>
<td>The entire process, when required</td>
<td>In groups Individual Oral Written</td>
<td>Students apply what they have learned in other situations and appreciate receiving it.</td>
<td>Moment in which professor and student become aware of what needs to be improved, what is right, wrong, what needs to be improved and how to improve it.</td>
<td>Confirmatory Achievement-Oriented Gap-Oriented Learning-Oriented</td>
</tr>
<tr>
<td>4</td>
<td>Non-formal, self-taught</td>
<td>At the beginning of the class</td>
<td>Entire class Individual Oral Written</td>
<td>Mainly taken advantage of by advanced students</td>
<td>Conversation about stated and related aspects. Importance of respect and closeness to enhance skills.</td>
<td>Corrective Achievement-Oriented Gap-Oriented</td>
</tr>
</tbody>
</table>

Source: author.

Student perceptions

Students in this program, up to and including their junior year, have not had feedback as coursework in any of their subjects. This is demonstrated in the way they conceptually refer to feedback in their focus groups. Table 5 below provides a synthesis of the above:

Table 5- Student perceptions of feedback practices

<table>
<thead>
<tr>
<th>Concept of Feedback</th>
<th>Characteristics of Good feedback</th>
<th>Effects on Learning</th>
<th>Types of Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback as “Dialogue”, understood as unidirectional “speech” from the professor to the student, without joint construction, and retroactive in nature. Although students point out that feedback should not feel imposing, this may occur or not merely based on the form it is transmitted, for example, by suggesting rather than ordering. E3: “...it's dialogue, conversation, they ask you why you thought the answer was this, and not that. It's like a constant dialogue, [professors] give you suggestions how it could be done or what to look for to find out more about this subject. Maybe [the feedback] helps...it's not like 'you have to do this and that'...it's more of a dialogue”.</td>
<td>Feedback should be clear, specific, very detailed (if written, with symbols that help understanding, such as arrows), with suggestions for improvement, timely, consistent with assigned scores and grades. Although feedback should be directed at the content evaluated, students value comments on formal aspects, such as writing and spelling.</td>
<td>Short-term: Used to check or verify learning; to become aware of and understand mistakes. “I see feedback as a verification of learning...as a validation”. Medium-term: to perform better on future tasks. “[Feedback is] a basis for new topics as well.” Long-term: to shape the future by acting professionally as professors. “[Giving feedback helps] us to generate it when we teach our students.”</td>
<td>Confirmatory, Corrective, and Gap-oriented.</td>
</tr>
</tbody>
</table>

Source: author.
Discussion

The individual data points analyzed, as a whole, yielded categories of emerging conceptions from professor practices, oral and written; and from student perceptions. The categories that this study was able to define for the Chilean context are discussed below.

Feedback understood as correcting tasks

In this research, three of the four professors gave feedback on graded coursework and necessarily had to communicate student learning level as either number or concept (and, in most cases, accompanied by a scoring system, checks and X marks). One professor of the group heavily preferred oral practices, whereas the others had mixed practices. Students felt there was greater impact on their learning with the combined approach, which indicates that oral feedback is not a dominant conception. Furthermore, although students expect their professors to indicate their successes and mistakes, they do not attribute any value to the practice as feedback, and did not even mention it in focus groups.

Feedback that only indicates whether the work is correct or incorrect has little impact on learning (HATTIE & TIMPERLEY, 2007). Grades, checks, X marks, or other symbols give very limited information, and so the student has little guidance in improving. This can be compounded when the grade is not good, acting as demotivator (JONSSON, 2013). Indeed, previous studies indicate that grades in general, even when accompanied by good-quality comments guided by a conception of constructivist feedback, do not motivate students to improve learning; rather, students become more concerned about their grades, and the presence of the latter “cancels” the beneficial effects of the commented feedback (BUTLER, 1988; CROOKS, 1988; GIBBS & SIMPSON, 2009; JONSSON, 2013; NICOL, 2010; SADLER, 1989; STOBART, 2006).

Feedback understood as specifying learning not yet achieved

In spoken feedback with their students, three professors spent most of their time highlighting diverse aspects of what the student had not achieved, at differing levels of specificity. Two of the professors preferred to give this type of feedback through written comments. Students value this practice, although they hope that it will also be given with suggestions for improvement.

This emerging category is descriptive feedback, specific, directed at work, centered on the process, is followed by the student identifying what he or she did not achieve (HATTIE; TIMPERLEY, 2007), and in some cases accompanied by guidelines for correction. The focuses may be mistakes committed, incomplete aspects or absences, in relation to both the form and the substance of student work. The breadth of practices in this feedback type suggests a variety of purposes: accountability, because both the institution and the students expect feedback to be given; promoting improvements in student learning, because it allows them to understand the nature of their mistakes; and encouraging self-regulation processes in students, because it motivates them to review their work and autonomously generate ideas on how to improve it (BROWN; HARRIS; HARNET, 2012).
Feedback understood as projected improvement

In oral feedback, two professors posed a series of questions to students looking for ways to improve their work, focusing on both specific and general aspects; they gave space to dialogue; they received and interpreted answers; and they focused efforts on directing students towards future performances in which they could transfer or apply knowledge again. This form of feedback was found in only one written work, which, consistent with the nature of this conception, was an ungraded progress report that was only reviewed for the sole purpose of supporting the preparation of the final work. Many tracts of literature (CARLESS, 2015; HATTIE; TIMPERLEY, 2007; SADLER, 2010), suggest these professors will have a greater impact on learning. In the words of Sadler (1989), professors here are contributing to closing the gap between the initial state of the student body and the desired state. Although most of students in the focus group had expectations for short- and medium-term improvements, some mentioned the effect that feedback has in shaping their future professional actions.

Feedback understood as dialogue

This category arose from student comments, based on what they termed dialogue. According to the literature, feedback as dialogue consists of a process that involves a coordinated interaction between professor-student, or even student-student. Such interaction, with a committed student, should unfold as an activity to construct, share, and even negotiate meanings with their professor and peers. To this end, the professor must establish an appropriate context, preceded by a stimulating and interactive teaching environment, adapt comments to the needs of students, and resort to various sources, including peers, and various forms of dialogue (CARLESS, 2015; KERR, 2017; NICOL, 2010).

That said, the student focus group described and exemplified a process of transmission of information from the professor to the individual, a unidirectional communication focused on the delivery of comments and questions, and even suggestions for improvement, which positioned students as passive recipients. In short, the students were aware of a lack of interaction with their ideas, making it very difficult to produce knowledge from such information. According to Ajjawi and Boud (2015), this is a transmissive approach in which feedback is meant not as dialogue but rather as a monologue, and in which the dynamic and interpretative nature of communication is not taken into account.

Conclusions

Characterization of feedback from professors

The results of the study show that the feedback offered by professors to their pedagogy students has different nuances. On the one hand, oral feedback tends to be descriptive and focuses mostly on specifying what needs to be improved and on the construction of learning. When giving feedback, all professors communicated the purpose
behind the activity and assigned a considerable amount of time to the observed session. Though generally directed towards the entire class, professors also gave feedback through dialogue with individual students or with smaller groups. A positive observation is that the focus of the feedback was on student work, and not the students themselves; and indeed, that no negative comments were evident.

On the other hand, written feedback was mostly confirmatory, specific, retroactive, and specifying what needs to be improved. Discourse with all participants had a commonality in that feedback must be corrective, and the majority added it should address achievements and specify what is missing. Only one professor stressed the value of feedback to build learning. In other words, participating professors saw the use of feedback as a practice to explain results and justify assigned grades, though with the pedagogical value behind understanding the nature of student error.

Predominant underlying conceptions and the use of results

The predominant conceptions of participating professors underlying their feedback were Correcting tasks and Specifying Learning not yet Achieved. Under these conceptions, how students use feedback is more complex. Given that students have here indicated that the best feedback is that which gives them suggestions for improvement, it seems paradoxical that they have received this form the least. While we have shown the current paucity of feedback training in primary teaching education programs in Chile, these predominant conceptions are viable candidates upon which pedagogy programs may base their improvements to feedback practices.

There are discrepancies between professors and students regarding the use of feedback results to promote learning. Professors who conceive of feedback as projected improvement are aware of how students use feedback to improve, and monitor their learning outcomes; those who perceive it as task correction indicate that its usefulness is reduced and that the time they take to give feedback, especially with large classes, makes it difficult. Students tend to conceive feedback in the short term as an exercise of verification of learning, perceiving less usefulness than when feedback is given with a long-term view. In the latter, students emphasize the modeling action of their professors with respect to their future work performance. In other words, future teachers are aware that how they provide feedback to their students is closely linked to the type of feedback experienced in their initial teacher training studies.

Final considerations about learning feedback

Students acknowledge that they have had no academic training in feedback in any subject or coursework, nor had they broached the subject in high school. The above leads to two conclusions: the first is that their knowledge about feedback has been built from their own experience; the second is that this experience has been strictly with university professors during their future teacher training. The difficulty they have in
trying to conceptualize the feedback process is indicative of this, as is their facility in characterizing the good feedback given by their recent professors.

Conceptualizing of and characterizing “good quality” feedback as something closer to a monologue suggests that this type of feedback is the best that students have experienced. The authors recall the term “apprenticeship of observation” coined by Dan Lortie (1975), which describes how future teachers learn by spending many hours in contact with their professors, constructing a series of ideas and conceptions about teaching, evaluation, feedback, among others. One of the limitations of this way of learning, in contrast to other professions, is that future teachers may not perceive that what they experience on teaching, evaluation, feedback, etc., is only a partial vision of what a teacher must do (BORG, 2004). However, in the case of the focus groups here, it seems that students have been able to recognize and distinguish in their professors feedback types like correction that, according to the literature, are not adequate in improving learning.

Finally, it is necessary to emphasize that feedback should be included in curriculum planning processes for Initial Teacher Training programs. In order to do so, professors must be clear on the reasons why they give feedback, know what ideas they will communicate to their students when they deliver evaluation, recognize where frequent errors are, and promote reflection in their students as to why they occurred. There needs to be a dialogue with the students, making sure that the language chosen is understandable to all and that student participation is encouraged. We consider that the way to materialize such inclusion is the incorporation of feedback as a subject of study in initial teacher training programs, whether in the subjects of evaluation, planning, or in the different pedagogical courses that make up Primary Education programs.

References


GAETE, Alfredo; GÓMEZ, Viviana; BASCOPÉ, Martín. ¿Qué le piden los profesores a la formación inicial docente en Chile? Temas de la Agenda Pública n. 86. Centro de Políticas Públicas UC. Villarrica: Pontificia Universidad Católica de Chile, 2016.


Gloria Contreras Pérez; Carmen Gloria Zúñiga González


Received: 15.03.2018
Reviewed: 21.08.2018
Approved: 09.10.2018

**Gloria Contreras Pérez** is a doctor in Educational Sciences, master in Educational Evaluation and professor of Mathematics and Physics. She specializes in evaluation of learning at different study levels, with emphasis on the formative potential of evaluation. She also focuses her research on the evaluation of teaching, both at school and university level.

**Carmen Gloria Zúñiga González** holds a PhD in Education from the University of Western Australia and is a Professor of History, Geography and Social Sciences. Her main lines of research are Teaching and Learning History, Social Sciences and Citizenship Training for primary and secondary education, and Pedagogical Evaluation.