Formative assessment and feedback: Making learning visible

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ABSTRACT

The study explores how assessment information is received and attended to. The research is linked to a 2-year intervention project involving six Norwegian upper secondary schools, and with a particular focus on vocational training and the three core subjects: English, Norwegian and Mathematics. Survey data was collected from five schools, including both vocationally and academically oriented education. Other sources of data are focus-group interviews in three of the five schools, involving students, teachers and school leaders. Findings show that there are significant differences in how students and teachers perceive feedback practices. There are also significant differences between boys and girls, as well as within the various school subjects. Students experience more feedback in vocational training than in the more traditional academic subjects.

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Feedback is seen as a primary component in formative assessment and one of the factors that have the strongest influence on learning (Black & Wiliam, 1998; Crooks, 1988; Hattie & Timperley, 2007; Hattie, 2009). This stance is increasingly being emphasised in policy documents, trusted by teachers and expected to be ingrained in the cultures of educational institutions (Crisp, 2007). However, positive effects of feedback are not always the case. Kluger and DeNisi (1996) found that more than one third of the effects indicated negative impact of feedback on learning. Shute (2008) uses the term ‘formative feedback’ which she defines as “information communicated to the learner that is intended to modify his or her thinking or behavior for the purpose of improving learning” (p. 154). In her article she draws attention to aspects of feedback that actually have positive impact on learning. She wraps up the article by synthesising lists of interventions like “things to do”, “things to avoid”, “timing issues” and “learner characteristics”. Hattie and Timperley (2007) also address aspects of feedback that influence learning in a positive way and develop a model of “feedback to enhance learning” (p. 87). Both these influential articles have one common trait: the focus is on the provision of feedback and characteristics of the feedback as information provided mainly to the learner. Inherent in Shute’s (2008) definition is the assumption that it is the message that modifies thinking and behaviour. By focusing on timing and learner characteristics she also emphasises that the delivery of the information building on a transmission model of learning needs to be examined, and the feedback provider should take into consideration that different learners interpret feedback information in diverse ways. We find the same pattern in Hattie and Timperley’s (2007) model: they bring the feedback information or feedback message up-front. These perspectives are well grounded in research and bring forward useful information that is needed to understand how feedback enhances learning. However, there is an element that is missing – or silenced – in these well-known review articles: the role of the agentive learner is not explicitly elaborated (Sadler, 1989a; Wiliam, 2011). There is an implicit assumption that for feedback to be formative (Shute) and feedback to enhance learning (Hattie and Timperley) the feedback needs to be formulated, delivered and framed in such a way that it invites learners’ active engagement with the feedback.

In a recent article Sadler (2010) emphasised the need to include in the analysis of formative assessment students’ understanding of the feedback information and the active use of it in further learning. Earlier, Ramaprasad (1983, p. 5), from an organisation theory perspective added the active use of feedback as a necessary condition: “The information […] is feedback only when it is used to alter the gap” between the actual level of performance and the reference level (see also Sadler, 1987). Boud (2000, p. 158) claims that “unless students are able to use the feedback to produce improved work, through, for example, redoing the same assignment, neither they, nor those giving the feedback, will know that it has been effective”. Even though claims have been made that the receiver of feedback is the one who decides if the feedback is to be of use or not, we still know
little about the learners’ response to feedback (Jonsson, forthcoming).

In this paper the centre of attention is the use of feedback, as viewed by those who give feedback (teachers) and those who receive feedback (students). The specific questions to which we sought answers are: How do teachers and students in the same context (secondary school) perceive feedback practice? Are there differences in feedback practices across subjects and across programmes (academic versus vocational)? These questions generate four analytical categories: teacher–student diversities, subject diversities, programme (academic versus vocational) diversities, and diversities across schools.

Context of the study

The article reports from a research and development project that was conducted in the context of a two years development project focusing on assessment in six upper secondary schools in Western Norway. The development project was run in collaboration with the regional county. All upper secondary schools in the county were invited to apply for participating in the development project. The six project schools were selected according to the following criteria:

- Mixture of rural and city schools
- Mixture of academic and vocational oriented schools
- Mixture of small and larger schools
- Engagement in emphasising assessment for learning, as expressed in the school’s development plan

Each school had selected six participating teachers for the development part of the project, ensuring that there were at least one from each of the subject areas dealt with in the study, and from the school leadership. The project focused on conceptualising ongoing practices and strategies for improvement of feedback practices in the three core academic subjects in secondary schools in Norway: English, Norwegian and Mathematics. In addition to differences across subjects, there was also a mix of academic and vocational (e.g. cookery, carpentry and hairdressing) programmes.

As part of the development project each school set up a development plan that involved conceptualising ongoing practice and trying out new strategies for formative assessment in the subjects. The current paper focuses on an early stage in the project, while the schools were planning interventions in the feedback system and practices.

The authors of the paper were involved in setting up the development project. There was a division of responsibilities in that the school region was responsible for monitoring and directing the development project, and the university researchers were responsible for the research part. However, the researchers supervised the project leaders, had presentations about research on formative assessment and gave feedback to plans that the schools presented. In some occasions we were also invited to give talks in schools.

Research design, data gathering and analyses

A mixed approach was used to elicit complementary data from the respondents. A mixed-method design (Johnson, Onwuegbuzie, & Turner, 2007) combines “the broad purposes of breath and depth of understanding and corroboration” (p. 3). Quantitative survey data were collected from five of the schools (one school was not able to organise the data collection). Qualitative data (focus group interviews) were collected from three schools, including both vocational training and academic oriented schools. The quantitative data were gathered halfway into the first year of the project period; in February 2010.

The data collection process can be summarised as follows:

- A survey questionnaire to all teachers in the five selected schools (N = 192).
- A survey to all students in the first year of upper secondary schools in these five schools (N = 391).
- Focus group interviews with groups of teachers and leaders (one group of each from each school), and two groups of students (separately) in the three schools.

The survey questions framed assessment and feedback practice in the context of tests and assignments. In the interviews a wider spectrum of assessment and feedback contexts was introduced, which allowed us to explore the concepts of assessment and feedback and expand the analysis to classroom practice and interaction between teachers and students and among students in the context of teaching, learning and problem solving.

The questionnaire was validated in two ways. First, an expert on surveys critically examined a draft. Next, the survey was piloted with a group of students and teachers from a school that was not among the sample schools or involved in the development project. The pilot included subsequent discussion with participating teachers and students. The surveys were revised according to comments made, and ambiguous questions were removed. The web-based questionnaire consisted of a set of 29 statements addressing diverse aspects of assessment and feedback systems and practices. The respondents were asked to consider whether the statements were correct or not, according to their experience. For each statement the respondents could tick one of four boxes: (1) correct, (2) nearly correct, (3) correct only to some extent and (4) incorrect. There was also an open space for comments at the end of the survey. By using a shared set of statements, reframed for the teacher and student groups, we were able to both register teachers’ and students’ responses and compare their views on specific aspects of assessment and feedback. All students, both those in academic programmes and those in vocational programmes, ticked off for each of the three academic subjects (Norwegian, English and Mathematics), while students in vocational programmes also responded on a fourth category: vocational training. Teachers were asked to respond to one of the subjects and identify which subject (including vocational training) they referred to when replying.

The questionnaire was administered to the students during classroom time within a given time period for each school. Teachers accessed the survey according to their own convenience. The study was accepted by the Norwegian Science Data Services. Written information about the study was provided for students, parents and teachers ahead of data collection.

SPSS was used for analysing the quantitative data. Using factor analysis allowed us to condense a large set of variables to four categories, which we framed as dimensions of students’ and teachers’ engagement with feedback. (1) Quality of feedback (e.g. length of feedback, with or without mark, informing about strengths and weakness, and system variables like timing and grade versus purely formative feedback). Cronbach’s alpha coefficients were .68 for teachers and .75 for students. (2) Students’ use of feedback (e.g. working on feedback on assignments in class, following up students’ use of feedback, using feedback to adjust teaching). Cronbach’s alpha coefficients were .69 for teachers and .77 for students. (3) Peer-feedback (commenting on the work of their peers). Cronbach’s alpha coefficients were .74 for teachers and .88 for students. (4) Student-involvement in assessment practice (discussing criteria, students setting their own learning goals, assessing their own work using the criteria). Cronbach’s alpha coefficients were .78 for teachers and .87 for students.
The factor analysis of students’ answers confirmed an earlier content analysis of the set of questions for both students’ and teachers’ responses. We did not, however, identify the same clear pattern in the factor analysis of teachers’ answers. Because of the large degree of overlap of the conceptual analysis and patterns in the students’ answers, we decided to use these factors in the further analysis. Correlation analysis was used to examine teacher–student, subject and programme diversities along these dimensions of the use of feedback.

Table 1 summarises the response rates for the web-based survey. The left columns for students and teachers indicate the number of respondents and the right column the total number of student and teachers. All teachers, but only students in the first year of high school were included, which leads to a relatively high proportion of teachers compared to students.

The quantitative data provided a baseline of assessment and feedback practices and the use of assessment information and feedback in the context of projects, assignments and tests. Interviews used results from the quantitative analyses as a starting point. The intention was to explore in more details teachers’ and students’ perceptions of assessment and feedback, and how assessment and feedback form and support students’ learning. Focus group interviews with school leaders, teachers and students in two schools were conducted in April. To supplement the qualitative data, focus group interviews with teachers and students in a third school were conducted in September the following school year (2010–2011). The school leaders recruited students and teachers for the interviews. We had two focus groups of students, one for teachers and one for leaders in each of the three schools. Since the sample was based on self-recruitment, there was probably an overrepresentation of high achievers among the students. An implication could be that the qualitative data give a more positive impression of students’ engagement with feedback than a more representative selection of interviewees would present.

The interview data were coded according to the categories that emerged in the factor analysis using NVivo software. Sub-categories were developed as a result of the analysis. In this paper we do not include analysis of the school leaders’ position.

Findings

Surveys findings

The findings from the quantitative data are presented prior to a more extensive presentation of the qualitative data from the four interviews.

The overall picture that emerges through the data is that teachers give feedback on tests and assignments in addition to grade. Feedback without grade – purely formative feedback (Gibbs & Dunbar-Goddet, 2009) – or withholding grade till the students have attended to the feedback, is rare. Feedback is tied to grading.

The majority of the students experienced feedback on tests and assignments as useful, providing information about how well they performed and what was expected of them. However, a large group of students did not find the feedback they received to be useful. The dominant picture that emerges is one of a generally weak formative assessment culture. In the perspective of Hattie and Timperley’s (2007) model of feedback enhancing learning, Shute’s (2008) recommendations, Black and Williams’ (2009) and Sadler’s (2010) analysis all subjects were weak in student involvement, quality of feedback and peer feedback. The use of feedback from tests and assignments were particularly weak. On the other hand, both teachers and students reported more extensive feedback while students were working on assignments than on completed works.

Except for two schools being significantly different with respect to one of the analytical dimensions, student involvement, there were no significant differences across schools in any of the other dimensions. We therefore excluded school diversity as analytical category.

Table 2 summarises the main findings of the quantitative analyses according to the three remaining analytical categories: programme, subject and teacher–student diversities.

Programme diversity. Norwegian, English and Mathematics are subject in both academic and vocational programmes. There were no significant differences between feedback practices in these subjects across programmes. Where differences occurred was in the practical part of vocational education: vocational training. Here, students experienced to be more included in setting goals and criteria than in the academic subjects, and they reported more peer feedback. Teachers in vocational training also emphasised student involvement in assessment and feedback. There is, thus, an overall pattern that students in vocational programmes are more engaged in feedback that students in academic programmes, due to the vocational training component.

Subject diversities. By comparing subjects we found no differences between Norwegian and English, the language subjects, except that teachers in Norwegian expressed more student involvement than teachers of English did. Consequently, in the analysis we have used Norwegian as a category for both Norwegian and English. Within the general picture of a week formative assessment culture there were differences between Mathematics, Norwegian and vocational training. Both teachers and students reported more student engagement with assessment and feedback in vocational subjects than in the academic subjects. The students were more satisfied with the feedback they received and reported more frequent use of peer assessment, than in the language subjects. The other pattern is that students reported less feedback in Mathematics compared to both vocational training and Norwegian. Feedback was short, students were not involved in discussing criteria and peer assessment was rare. On the other hand, in Mathematics there was emphasis on instructing students about problem solving strategies, ensuring that they understood the task and students were more engaged in correcting mistakes after tests.

Teacher–student diversity. Students and teachers agreed that students are not included in planning, setting criteria or discussing strategies for problem solving. Students and teachers agree on this issue. They also agreed that peer assessment is rare. Assessment and feedback is primarily an individual endeavour.

However, teachers tended to evaluate the quality of feedback they provide as more positive than students did. For instance, 97% of the teachers agreed to the statement “I give feedback that is useful for further learning”, whereas for the academic subjects nearly half of the students disagreed (response alternatives 1 and 2 (positive) and 3 and 4 (negative) put together). There was also a significant difference in students’ and teachers’ report on the
students’ use of feedback. Teachers expected that students use the feedback they receive more than the students say that they do. It seems that teachers overestimated the quality of feedback and students’ use of feedback, compared to what students reported. While the difference between what teachers reported and what students reported were significant only in two of the dimensions the disparity transcends the data as a whole, as shown in Table 3.

We also found a student–student difference in that female students were generally more critical than male students, as shown in Table 4, which could indicate that female student share higher demands than male students do. However, only two of these differences are significant: quality of feedback (.004) and peer assessment (.000).

**Interview findings**

The starting points for the interviews were the preliminary findings of the quantitative analyses. The interview data were analysed in accordance with the four factors generated by the conceptual and quantitative analyses. In the current paper we have chosen to address only one of these: the use of feedback as perceived by teachers and students. The focus of the study was expanded in the interviews in that classroom activities, teaching and student learning and problem solving in and out of tests and assignments were addressed.

The use of feedback is closely related to student involvement and peer assessment. It is also an aspect of the quality of assessment; what feedback is provided, how it is presented to the students, how it is accepted by students, and the extent to which it is integrated in future teaching and learning.

The interviews confirmed the dominant tendency in the quantitative analyses: systematic use of feedback as a support of students’ learning is a weak element in the educational practice. Likewise, the teachers do not have systematic strategies for implementing feedback they have given to students in their future teaching. The provision, as well as the reception, of assessment feedback is an individual endeavour for both teachers and students, and neither is systematically tied to future action. Nevertheless, from the qualitative interview data there are other stories to tell and details to add to complement the quantitative

<table>
<thead>
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<th>Subject diversities</th>
<th>Teacher/student diversities</th>
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<td>T-test Students</td>
<td>T-test Teacher and student replies</td>
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<tr>
<td>T-test Teachers</td>
<td>T-test Teachers</td>
<td>No significant differences on the category as a whole, but on individual questions.</td>
</tr>
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<td><strong>Student involvement</strong></td>
<td>Significant differences between Norwegian/English and vocational training. Same pattern in all questions. Most student involvement in vocational training, least in Math. Significant differences (p &lt; .005) between Norwegian/English, Math and vocational training. Most positive in vocational training, least positive in Math. Significant differences (p &lt; .005) between students and teachers. Quality rated higher by teachers than students.</td>
<td></td>
</tr>
<tr>
<td><strong>Quality of feedback</strong></td>
<td>No significant differences.</td>
<td>No significant differences between teachers across subject fields.</td>
</tr>
<tr>
<td><strong>Use of feedback</strong></td>
<td>No significant differences.</td>
<td>No significant differences across programmes.</td>
</tr>
<tr>
<td><strong>Peer assessment</strong></td>
<td>Significant differences. Students experienced more peer assessment in vocational programmes than in academic programmes (p &lt; .010).</td>
<td>Significant differences (p &lt; .005) across subjects. Same pattern as for students.</td>
</tr>
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<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Std. error mean</th>
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<td>.6734</td>
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analyses. One central theme in the stories is that many teachers express great concern for their students and a sincere urge and responsibility to support students' learning.

**Teachers.** The teacher–student interaction, and teachers' effort to support students' learning are core aspects of the educational practice. However, establishing a shared discussion of learning in the classroom is a challenge. It presupposes two active parts that willingly engage in communication. One Math teacher expressed his unease with the situation of supporting the academically weak students and the ambivalence related to dealing with an academically diverse group of students as follows:

There are students who do not hand in anything. They write nothing when they cannot solve a problem. It makes it hard to help them, because you do not know how much they have understood. [...] Feedback that you provide to clever or average students is useful; they read it and they use it next time they hand in work for assessment.

Generally, the teachers expressed great concerns for the academically weak students, who also tend to be passive learners. It is hard to give them feedback and not least, to follow up how they attend to and use the feedback. On the other hand, those students who are actively engaged in learning, they use the teacher. One English teacher said: “While working on an assignment, they are eager to seek help.” They are demanding students and she connects to them. “I know that they read and follow up [the feedback]. But then, there are other students who are difficult to reach out to.”

Teachers also expressed concerns about students’ capability to respond to feedback—whether they were interested or able to follow up feedback they received. “I ask myself whether students need training in how to use feedback. We should perhaps have a course or something like that. I do not know if they know how to use [feedback].” But the challenges go even further; the teachers do not have the time needed to follow up all students. It is hard “to make it work.” There were also voices that expressed general doubt about students' interests in feedback. “If you give back an assignment or a test, they might just glance at it, but then throw it in the bin on their way out.”

The teachers framed feedback on tests and assignments as corrections of completed work. Giving feedback to students underway, for instance when students were working on an assignment, was unusual. “Underway, no, I do not give feedback until the work is done, at the end of a period.” It was not common to write comments suggesting how a piece of work in progress could be improved. “What else can I do besides saying ‘you have to work more on this’—capital letters and full stop. Anyways, they make the same mistakes over and over again.”

**Students.** The students' descriptions align, to a large extent, with information collected from the teachers. “We do not really do anything with the feedback, we actually start on the next topic,” one student said, explaining what happened when they got back a graded test or assignment with the teacher’s comments. Another student in the same focus group agreed, but “I might think about it if there is another project.” A third said that to use the feedback, “I would have to feedback from a teacher that actually had given comments to the grades, but [usually] there isn’t much said.”

Students did not express interest in understanding and using the feedback from tests and assignments. “We do not correct what is already handed in. [...] It would be wrong.” There are, however, students who expressed a different view. “If I get a test back and there is something I have not mastered [...] I look it up and try to find out where I did something wrong. If, on the other hand, it is something that I do not have a clue about, I just put it in the backpack or in the bin.”

Now, while the educational practice seemed to be weak on the quality of feedback and the use of feedback in the context of tests and assignment, there seemed to be a richer feedback environment in the classroom setting. That is, as an integrated element of teaching and learning.

However, we need to repeat our moderation here: students who took part in the focus group interviews confirmed our impression that they in large represented the more successful students. This was the case at least in some of the focus groups. The students sometimes referred to other students, “those who do not care to get interested, and only get low grades, as they usually do”.

In the interviews we expanded the object of analysis beyond tests and assignments by asking about classroom activities, teacher–student interaction and student–student interaction. We were then able to identify a richer feedback environment, particularly for students who were engaged and eager to learn.

There were four categories of classroom settings that students referred to as potentially feedback-rich: the teacher's working through a test or assignment when it was returned to the students after corrections, student presentations of their projects, group-work, and discussions among the teacher and students.

**Working through a test or assignment.** When the teacher had assessed a test or assignment and it was handed back to the students, he or she often explained how tasks could be solved and discussed potential mistakes with the students in the classroom setting. Students found that useful, they were able to see what they could have done otherwise. “Like in Math, for example, if we all make the same mistake, then the teacher explains and tells us what we have to work more on.” When this review takes place, students often sit in pairs. The students divide their attention between the teacher’s way of solving the problem and what they themselves did on the test or assignment. They find mistakes in their own work and in the peer's work. “We were two correcting together [...] First the teacher went through the task and we could see what the correct solution was. If we were in doubt [when working together afterwards], we could ask the teacher.” However, the students did not call these processes feedback, but corrections of their work. Math was the subject they most frequently referred to, which is consistent with the survey data: students do not correct assignments or tests in Norwegian and English, meaning that the feedback is not put to immediate use.

**Project presentation** was a frequent assessment method in many subjects. Feedback was given immediately, mainly as oral feedback by peer students and the teacher. The students gave the impression that the feedback they received in the context of presentations was related to the presentation itself, how the project was presented, and not so much related to the content. This seemed particularly to be the case in academic subjects. In the workshop, in vocational training, a different pattern emerged. The feedback, and discussions about students’ work, was more related to the work itself. “We often come together, the whole group. Nobody knows whose work we are discussing. We go through them all and talk about the different products before we go back to our own work.”

**Discussions with the teacher.** Many students emphasised talking with the teacher when they had problems understanding a learning task or did not manage some problem-solving process. They would also contact the teacher after a test to discuss mistakes they had made. “If I have done a piece of work, then I will ask the teacher, he is the one who assessed it, and who knows what mistakes I made. He is the one who can tell you how to do better.”

The teacher could be contacted also when the students worked on new topics or exercises. These are examples of students’ agency in learning; they actively seek support from the teacher, they check out the progress of their work and discuss issues they struggle to understand.
Discussions with peer students. The workshop in vocational training is a typical setting where students attend to each other as resources in learning. "We usually work in teams, in groups, and then we ask around, check out with other groups that are working on the same task, asking for some help." Sometimes the students have to work on different tasks, because there are not enough tools for all students to do the same work processes at the same time. It implies that when one group of students starts on a task, other students might have completed that one, and they can be contacted for support or help. Often the teacher is "out of the picture".

Some students found it more useful to get help from another student than from a teacher. "In my case, I do not find it so easy to ask the teacher all the time. If I am stuck, and know that it is most useful to ask the teacher, then I have to read more. But it is easier to ask another student [...] They explain it better, sort of. The teacher often says: 'you need to read more, you have not paid attention, and such [...]. If you ask about something, about a unit or something, then he tells all about that unit, without answering the question. It becomes very much, like, thinking yourself. He does not get into the problem, sort of. [...] It is not always easy for the teacher to meet you where you are yourself. [...] He knows much more, but does not always see the problems that we have."

The qualitative analyses showed that there is no systematic use of peer assessment or peer feedback. The interview data confirms the tendencies found in the quantitative data, illustrated by the students’ quotes above. Using each other as learning resources is not something the teachers have introduced. "It is just something we do [...] I am working on something, and another student comes by and says 'that looks good', and we get some ideas." These students say that it mostly takes place among students sitting next to each other in the classroom or work alongside each other in the workshop and among friends. These finding support the stance that students’ agency in learning, their active involvement with problem solving and initiative to communicate with peer students and teachers are essential aspects of feedback.

Conclusions and implications

Research on assessment cannot and should not present too tight guidelines for how assessment is to be carried out (Black, Harrison, Lee, Marshall, & Wiliam, 2003) and how feedback is to be given. Good feedback is all about exploiting 'moments of contingencies' (Black & Wiliams, 2009), or as Brookhart says: "It is just-in-time, just-for-me information delivered when and where it can do the most good" (Brookhart, 2008, p. 1). The current study, which looks at teachers' and students' perceptions of feedback, and more specifically, the way feedback is being used, supports these claims.

The findings indicate that feedback practice is to a certain extent more subject-related than school-dependent. There are different practices in the teaching of languages, mathematics and vocational training. Moreover, the study suggests that the context of teaching and the nature of the subject affect the way feedback is practiced. For instance, in a workshop setting immediate oral feedback from teacher as well as peers seems to be more common than in more academically oriented classrooms. In Mathematics there is emphasis on correct answers and how to get to them than in language subjects, therefore more emphasis on corrections of mistakes.

Students' perceptions are that feedback practice also relates to the educational attitude and beliefs of the individual teacher, which at large determine the feedback practice, and accordingly, also the usefulness of the feedback. At the same time, the teachers believe that it is up to the students to use the feedback and that passive students, who they often see as weak, are not able to use the feedback teachers provide.

It seems as if the participating schools have not yet developed what we would call a culture of assessment for learning with which all teachers and students are familiar. A culture of assessment needs to be developed over time, and it involves the leadership, teachers and students working together in developing goals, setting criteria, providing useful mutual feedback to each other, and exploring how feedback can best be used to enhance learning for teachers as well as for students (William, 2011). The data from this study points at sporadic and individual initiatives in actively attending to feedback by teachers and students. However, a systematic, active use of feedback has not been adopted by the schools. On the other hand, when occasionally introduced, the active use of student involvement is appreciated by the students. They want to receive critical, constructive feedback, they find it meaningful and useful for future learning. There seems to be a paradox, though, in that teachers do not believe students really want to receive informative feedback, 'they are only interested in the grades'. This discrepancy points to the need for teachers and students to communicate better, to engage in mutual learning dialogues. The qualitative data show that students appreciated personal communication with teachers about their learning. It is not enough to give written feedback, even if it relates to explicit goals and criteria, taking it for granted that the students understand these and can therefore make use of the feedback. The teacher–student relationship is one factor that may influence on how the students relate to feedback (Ruiz-Primo, 2011).

Research indicates that telling the students about assessment goals and criteria does not really involve students, they need to be active in the development processes and become active partners in assessment issues related to their own learning (Boud & Falchikov, 2007; Sadler, 1989a,b). The findings in the current study suggest that the students do not feel they are actively involved in practicing assessment. The data show significant differences between the way teachers perceive their own way of giving feedback, and the way students perceive the feedback they get. Teachers find their feedback useful and blame the students for not using it, whereas the students complain about the usefulness of the feedback they receive. It seems that teachers need to be more explicit when giving feedback, explaining how the assessment is formed, be clear about what is required of the students, and suggest alternatives for improvement and future work, all of which aligns with the literature on feedback. Students want to know the goal, where they are at the moment, and how to proceed (Hattie & Timperley, 2007, among others).

The interview data reveal two main challenges, the first of which is a lack of systematic feedback procedures including how feedback is applied in future learning and assignments. The second challenge relates to exploiting instructional situations better by creating an ongoing dialogue between teacher and students and involving learners as active partners of their own learning (Boud & Falchikov, 2007). In these perspective there seems to be a need to re-conceptualise feedback to emphasise assessment and feedback as an integral aspect of learning and problem solving.

Practical implications of the above are that the teaching staff establishes a system of giving, receiving and applying feedback within which teachers and students have to act. However, this requires that teachers as well as students develop a kind of feedback literacy, which takes time and relates to establishing an assessment for learning culture in the school.

At the systematic level it seems that assessment is mainly related to corrections and grading, and the data does not indicate that communication about learning processes between teachers
and students are viewed as feedback. Feedback is perceived to be something that follows a test or an assignment. However, when analysing the interview data in depth we did find that there are four classroom situations that are rich in feedback opportunities: (1) the teacher works through a test or assignment when returning these to the students after corrections, (2) student presentations of projects, (3) group-work and (4) discussions between the teacher and the students. Teachers’ and learners’ feedback literacy should not relate only to written feedback on formal assignments, but also to developing feedback practices that are closely integrated into classroom instruction and are not viewed as ‘added on’ activities. Students in the current study were able to identify the above specific feedback-rich classroom situations which can be used as a starting point in developing teachers and students’ feedback literacy. The timing of the feedback seems to be of importance (Black & Williams, 2009), and by integrating feedback more into instruction in general, it becomes more useful for the students as it relates to what they are doing at the moment. However, the extent to which students perceive feedback as useful also relates to the way and language in which it is given and to the class atmosphere, so critical feedback will be perceived as constructive and not judgmental. The students in the current study asked for critical, clear and constructive feedback, but also demonstrated the key role of the agentic learner.

References


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