Lost in translation : congruency of teacher and student perceptions of assessment as a predictor of intrinsic motivation in ethnodiverse classrooms

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General introduction

Student motivation

Fostering student motivation through assessment and instruction is generally considered important to achieve positive learning outcomes. Harlen and Crick's (2003) review of classroom motivation literature showed how important the focus on learning instead of grading is for students; when the focus of teachers is on helping students gain insight in their own learning processes students are more intrinsically motivated. Intrinsic motivation is the tendency to engage in activities for the inherent joy they bring. This is positively associated with persistence, mastery-learning goals, deep learning and well-being (Ryan & Deci, 2000) and is therefore worthwhile to foster in the classroom. How students generally become more intrinsically motivated through learning is well explained by Ryan and Deci's (2000) Self Determination Theory (SDT). SDT proposes that students have to satiate three universal 'needs' to feel motivated for an educational activity (Deci & Ryan, 1985; Ryan & Deci, 2000); (1) a feeling of being autonomous, (2) a sense of relatedness with others in the activity; and (3) experiencing the competence to fulfill a given activity. Sambell and McDowell (1998) showed that students who categorize their teacher as more of a 'teacher' than as a 'judge' experience more relatedness to their teacher, and students who do not feel free to learn in their own way report less experienced autonomy support and less intrinsic motivation for doing homework (Assor, Kaplan, & Roth, 2002). Negative evidence for the relationship between motivation and students' need to experience competence is provided by Black and Wiliam (1998a) who showed that feedback meant to foster student ability and feelings of competence given to low ability students may be perceived as proof of teacher's doubt about their competence.

The perceived learning environment plays an important role in explaining student motivation (Entwistle, 1991), and as such it is important that students recognize when teachers act to support their learning. However, research evidence is suggesting that teachers and students can strongly differ in their opinion of how their learning is supported by their teachers (e.g., Könings, 2007; MacLellan, 2001). It is difficult for students to accept feedback and support when they don't recognize it as such, and it is difficult for teachers to adapt when they don't experience that their instructional support is not effective or understood. It is not known how this lack of congruency between teachers' and students' perceptions of learning situations impacts student motivation. The goal of this dissertation is to investigate to what degree teachers and students agree on what is happening in the classroom, how possible dif-

ferences can be explained, and whether differences of perception are related to students' motivation for learning.

The formative assessment perspective: Assessments for Learning.

Since educational culture has shifted in the past decades from a testing culture to an assessment culture (Birenbaum, 2003), the importance of effective communication and understanding between teachers and students has become more salient. In a testing culture, instruction and assessment are seen as separate and independent entities (Segers, 2004) and 'assessment of learning' is the core purpose of assessment activities. This means that in a testing culture, assessments of performance (process) and achievement (products) are separated from their learning context and tend to focus primarily or exclusively on established or available knowledge in which test results are mainly collected to be used for summative purposes, such as grading. The current shift towards an assessment culture where assessments are part of the learning process ('Assessment for Learning') has transformed assessments into scaffolds aligned with instruction in support of learning. In order to help students become autonomous learners, much emphasis is put on facilitating student autonomy in their learning process. This means that assessments must be informative to that process, take place in more authentic contexts, and use a variety of measures to establish growth in achievements (Segers, 2004). Assessment then becomes part of the instruction and learning process as multiple assessment moments inform learners of their progress. Although a variety of modes of assessment are used to support student learning (e.g., peer assessment, portfolio assessment), all AfL practices have in common that they emphasize the role of students as active learners and the role of assessment as a tool for monitoring student progress in scaffolding learning. Assessment is seen to support learning when assessment information is both used to help students make progress in their learning efforts and when teachers adapt their teaching to meet the learning needs of students. Only when assessment information is used in this manner, does it gain its formative nature (P. Black & Wiliam, 1998b).

This shift from an Assessment *of* Learning to an Assessment *for* Learning perspective changed the role and position of teachers and students alike. Teachers stopped being passers on of knowledge and became mentors who motivate and inform students to demonstrate their learning, knowledge, and skills in diverse ways. Students changed from calculators of past achievements to self-regulated learners (Dochy & McDowell, 1997).

How AfL should be defined, and what its core principles are, has been explored by several researchers and institutions (e.g., OECD, 2005; Prosser & Trigwell, 1993; Stiggins, 2005). The principles proposed by the Assessment Reform Group (2002) summarize many of the positions taken in recent literature and have become well-accepted (Daugherty, Black, Ecclestone, James, & Newton, 2007). The central view of ARG's principles is that AfL is a process in which feedback is used as a means to bring students closer to their learning goals and which is connected to explicit criteria that are considered important by both the teachers and the students. The ten principles were first drafted to assist teachers in recognizing key dimensions of AfL-practices. Based on literature reviews and exchanges with assessment-experts the following principles

were formulated: AfL should (1) be part of effective planning of teaching and learning; (2) be recognized as central to classroom practice; (3) be recognized as key professional skills for teachers; (4) be sensitive and constructive; (5) take learner motivation into account; (6) promote commitment to learner goals; (7) promote a shared understanding of the criteria by which students are assessed; (8) include constructive guidance on how to improve; (9) increase learners' capacity to self-assess; and (10) recognize the full range of achievement of all learners.

In the eye of the beholders: teachers and students

The success of AfL is conditional on the successful integration of assessment into the learning process. This integration may be optimized by continual interaction between teachers and individual learners, in which feedback provision and its acceptance and utilization are key elements (P. Black & Wiliam, 2009). AfL is a two-way process in which not only students adapt their learning with information provided by assessments, but teachers need to adapt their teaching as well. In this respect it is of great importance that students' and teachers' perceptions on the nature and content of the assessment provided are congruent. If teachers believe they provide constructive feedback and communicate goals clearly but students do not recognize this, they are not likely to react to the support and its effectiveness in shaping student learning is diminished. In order for teacher assessment to feed into student learning the teacher may have to adapt word choice and complexity of the information entailed in the feedback to the students' capacities to understand the feedback. Learning involves detection and correction of errors (Argyris, 1977) and better learning comes from not only addressing actions to change outcomes, but from correcting errors in such a way that it involves the modification of teachers' underlying conceptions of what indicates good teaching (P. Black & Wiliam, 1998a; Assessment Reform Group, 2002). Unfortunately, it has become clear that teacher self-reports on their instruction are limited by a lack of reflective awareness (Keiny, 1994; Wubbels, Brekelmans, & Hooymayers, 1992), while student observations are shaped by their expectations, needs and ability to understand the instruction (Den Brok, Levy, Wubbels, & Rodriguez, 2003). Congruency in teacher and student assessment and learning related perceptions are important for the success of classroom interventional activities (Loughran, 2010). This notion leads to the hypothesis that the less congruent teachers and students are in perceiving AfL practices, the less motivating instruction and learning will be to students. Misaligned perceptions lead to misunderstandings between teachers and students about the meaning, usefulness and purpose of assessment information (e.g., Bartholomew, Parcel, Kok, & Gottlieb, 2001; Norman, 1986), and students can perceive the learning criteria to be implicit and 'hidden' while they are perceived as transparent by the teachers (Könings, 2007).

Teachers and students can hold opposite opinions on what is practiced in classrooms. For example, a study by MacLellan (2001) revealed that when the teachers believe they are not taxing their students, support them in their autonomy, and have specified clear learning objectives, students may have contradictory perceptions: a heavy workload, little room for autonomous decision-making, and uncertainty about the learning objectives. This mismatch can lead to frictions between teacher and student and possibly cause problems in

the classroom. Könings (2007) for example, has shown that students are less motivated, and learn more superficially whenever they perceive less teacher support, than their teachers report to give. Education is not an objective reality perceived similarly by all stakeholders.

Structure of the dissertation

The aim of this dissertation is to explore whether teachers and students are in agreement about the level to which AfL is practiced in the classroom, and whether perception congruencies help explain intrinsic motivation in the classroom. To test the hypotheses of this dissertation, several steps were taken, which are described in each successive chapter. Given the limited instrumentation available to compare student and teacher perceptions of the classrooms, an instrument was developed and validated, which is the content of Chapter 2. Chapter 3 is about the question to what degree perceptions of AfL are congruent between teachers and students, and whether these congruencies can be explained by teacher and student level variables. After testing the prevalence of incongruencies within classrooms, its association with intrinsic motivation, as mediated by SDT's basic needs is tested in Chapter 4. In Chapter 5 is about the question whether the proposed relationship between AfL perception congruencies and motivation can be generalized beyond diverse ethnic groups in the Netherlands.

Chapter 2: A reliable and unbiased instrument is needed when comparing student and teacher reported perceptions of AfL-practice, however such measures are scarce. To validly test the dissertation's central hypothesis it is important that perceptions of students and teacher can actually be compared in terms of similarity of constructs measured, and also in terms of interpretation of the outcomes of the measurement instrument. In Chapter 2, the AfL construct is defined, and used as the basis for the development of a self-report questionnaire in a sample of 1422 students and 237 teachers. The aim is to develop a self-report tool, called the Assessment for Learning Questionnaire (AfL-Q) that can be used to validly compare teacher and student perceptions in order to answer the research questions posed in this dissertation. The data for this study were collected in November and December 2007.

Chapter 3: The argument is made that congruent perceptions of AfL are important for its effectiveness, yet little is known about the degree to which student and teacher perceptions are congruent and what factors would contribute to perception congruency. This chapter's focus is on the question to what extent teachers and students hold mismatched perceptions of AfL-practice. Explanations are sought from the perspective of self-verification theory, which predicts that efficacious teachers are more likely to be incongruent with their students perceptions, and from the perspective of language proficiency, which predicts that students need to have a strong grasp of the language of instruction in order to recognize and understand feedback. A sample of 650 students and 38 teachers was used to test the hypotheses. The aim of this chapter is to evaluate student and teacher perceptions of their AfL practice and find factors that may explain possible individual variance between students and teachers. The data for this study were collected in the period between April and June 2009.

Chapter 4: The central model of the dissertation will be tested in Chapter 4 for empirical evidence of the hypothesis that incongruencies are detrimental to student motivation, and that this can be explained through the basic needs as proposed in the Self-determination theory of motivation (Ryan & Deci, 2000), namely the needs of feeling competent, autonomous, and related to their teacher. The significant predictors of congruency found in Chapter 3 are also included in the model to test whether these predictors can help explain the tested relationship between congruency and motivation. The sample used to test this model consisted of 1466 students and 89 teachers. The data were collected in the Spring of 2010 and the Fall of 2010.

Chapter 5: Having established in Chapter 4 how teacher-student perception differences relate to students' intrinsic motivation, this relationship is further explored in Chapter 5. Even though SDT proposes that the link between intrinsic motivation and basic need fulfilment is universal (Chirkov, 2009), whether the association between the perceived learning environment and motivation is universal is still debated. One consistent finding in educational research is that immigrant students (especially from the second generation) are usually more intrinsically motivated for learning than national contemporaries. The question posed in this Chapter is whether ethnic differences in motivation can be explained by ethnic differences in teacher-student congruency, or whether the proposed relationships in Chapter 4 have differential effects for different ethnic groups. To this end, a sample of 775 students and 58 teachers was taken from the sample used in Chapter 4. Classrooms were included in this sample if they included, in addition to Dutch students, at least one student from the largest ethnic minority groups in the total sample, namely second generation Moroccans and Turks.

Chapter 6: The final chapter summarizes the findings, discusses possible theoretical and practical implications and points at some methodological challenges and desires for future research.