Support in Self-assessment in Secondary Vocational Education

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Abstract: For students to become prepared for the workplace, the skill of students to assess themselves is of larger long-term significance than the specific professional competences they acquire. This paper discusses the role of providing support to the students in the form of information on the relevance of the assessment criteria on their self-assessment skills. It is hypothesized that students are more accurate in assessing themselves when providing them with information on the relevance of the assessment criteria. Furthermore, the influence of the accuracy on next task performance will be explored. Results will be available by the time of the conference.

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In order to perform well in the workplace, students need professional competences, but they also need to be able to make judgements on their own strengths and weaknesses for lifelong learning to occur (McDonald, Boud, Francis & Gonczi, 1995). Despite the importance placed on student's self-assessment in current education, it appears that students are not always able to assess themselves accurately, because they are insufficiently able to decide on which criteria they should assess themselves.

In current assessment practices, students are often asked to come up with self-generated criteria and standards on which they want to assess themselves. However, it appears that students at the beginning of their study are not able to identify the standards and criteria themselves because they do not have a clear view on what is expected of them when it comes to their learning outcomes. For example, if student nurses have never seen a single patient before, how can they know which competences are important in patient-contact, or what constitutes "good practice" for this contact. It is thus the question if novice students should be asked to self-generate the assessment criteria.

If students are given assessment criteria, still, most of the time, only a few assessment criteria are relevant for a certain task. When students need to become competent self-assessors, they should not only be able to make an accurate assessment, but they should also be capable in taking a good decision on which criteria are relevant and which criteria are not relevant for assessing a task (Sadler, 1989). This is certainly true in the case of assessing real-life whole tasks. In real-life tasks, resembling professional life, a large database of potential performance criteria could reasonably be considered. The whole set of criteria can be split up in two parts: relevant and irrelevant criteria. In today's educational practices, often, no information on the relevance of the criteria is available for the students in advance. The question arises if students are capable of selecting the relevant criteria from the whole set of criteria. Regehr and Eva (2006) state that when students get the freedom of choosing on which criteria they want to assess themselves, there is a risk that they will only highlight the criteria on which they perform well or which they like because people naturally strive at creating a positive feeling. The risk is that students will thus not recognize exactly those learning needs that are really necessary.

Furthermore, if students are confronted with the whole set of assessment criteria without information on the relevance of those criteria for the task at hand, a lot of their cognitive capacity will be needed for choosing the relevant criteria from the whole set of criteria. Because cognitive capacity is limited (Sweller, van Merriënboer & Paas, 1998), possibly, insufficient capacity is left for an accurate assessment. The accuracy of the self-assessment may thus be influenced by the fact that students have to select their own criteria.

In this study, self-assessment is defined as the involvement of students in selecting standards and criteria from a predefined set of standards and criteria, making judgments about the extent to which they have met these standards and criteria and coming up with points of improvement. When students get better at self-assessment, their task performance will also improve because they have a more accurate view on what is expected from the tasks (Dochy, Segers & Sluijsmans, 1999).

In this study, the following hypotheses will be explored:

H1: *Students who receive information on the relevance of the criteria can produce a more accurate self-assessment than students who do not receive information on the relevance of the criteria.*

H2: *Students with a high accuracy of self-assessment are more competent in selecting points of improvement than students with a low accuracy of self-assessment.*

H3: *A positive relation exists between the accuracy of student's self-assessment skills and student's task performance.*

In Dutch Secondary Vocational Education students differ in the amount of study time spent at school and in the workplace. First, there is a school-based trajectory where the student spends 60% of his time at school, and 40% in the workplace. Second, there is a practice-based trajectory where the student only spends 20% of his time at school, and 80% in the workplace. Most of the students in the school-based trajectory are younger (age 16-19) than those in the practice-based trajectory (mostly adult students), and it can be assumed that both groups differ with regard to motivation and other variables. This research explores the effect of these differences on their self-assessment skills and their task performance.

Method

Participants and Design

One hundred and six first-year students of a Secondary Vocational Education in Nursing participated in this study. The experimental design was a 2x2 factorial pre-test - post-test design in which the effects of 'information on the relevance of the criteria' (Relevant criteria vs. All criteria) and 'variability in learning trajectory' (School-based vs. Practice-based) were studied.

The students of the school-based trajectory and the practice-based trajectory were randomly assigned to one of the two conditions of information on the relevance of the criteria. Fifty-two students, of which 40 are school-based students and 16 are work-based, are in the relevant criteria-condition in which they received information on the relevance of the assessment criteria. Forty-nine students, of which 27 are school-based and 22 are work-based, are in the all criteria-condition in which they did not receive information on the relevance of the criteria. All participants were rewarded with a cinema ticket.

Learning materials

Learning environment. The electronic learning environment called 'Care Village' (figure 2) consisted of learning tasks and an electronic portfolio. A database with three types of learning tasks was developed according to the principles of the Four-Component Instructional Design (4C/ID) method (van Merriënboer, 1997): 1) worked-out example tasks, 2) completion tasks, and 3) conventional tasks. Every task consisted of a case description (given situation, goal situation and solution process), leading questions to understand the case, an assignment to perform at school, and an assignment to perform in the workplace.

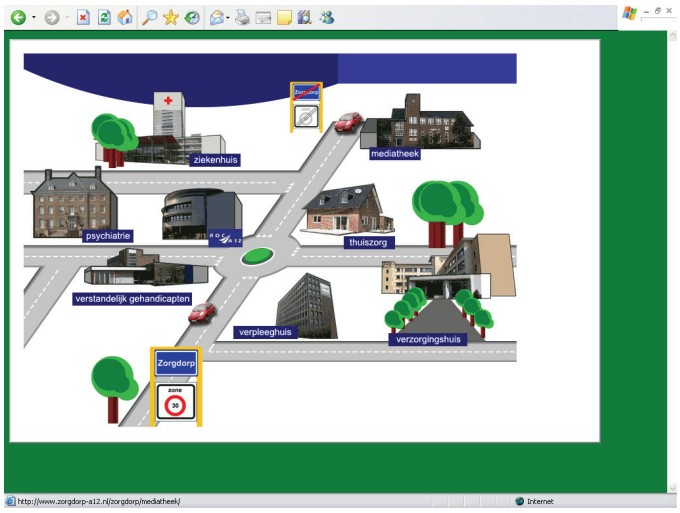

Figure 1. Care Village.

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