Recognition and realization rules in the assessment context of elementary school (10-12 th years old)

This instrument that was constructed to analyze recognition and realization rules in the assessing context took the form of a semi-structured interview. In the first part of the interview it was sought to analyze recognition rules (RC). The objective was to see if students could recognize the basic principle in marking (grading) test answers, distinguishing between *correct* and *incorrect*. In the second part, it was sought to elicit their realization rules (RL). Did students reproduce their teacher's text when correcting and marking? The questions asked related to tests which had already been given to students; one of these questions assessed factual knowledge, a second assessed concept understanding, and a third assessed the use of knowledge in new situations. Answers to each, covering the widest possible range of teachers' marks, were considered.

Interview

First stage (RC)

1. The student is given the first question and a set of 10 answers to it.
Interviewer – Here is a question from the test made by your teacher and 10 answers given by some of your classmates to the question. Please group the answers as you wish.

2. Students' are asked to indicate the answers in each of their groupings (through the notation A_1, A_2…) and to explain the reason for each grouping.

3. The second and third questions and sets of answers are presented, and for each question, procedures 1 and 2 are repeated.

Second stage (RL)

4. Students are again given the first question, the "correct answer" and mark value, and a set of 5 answers.

Interviewer – You have here the first question you were given before, and this is a correct answer. You are going to take on the role of your science teacher, correcting and marking the tests. These cards are for you only, so you can write whatever you wish on them.

5. Students are then asked to justify the mark they gave for each answer and to explain the meaning of the notations they have made.

6. The second and third questions and their values are given, and for each one, procedures 4 and 5 are again followed.

In order to analyze recognition rules, we organized the texts produced by students in the first stage of the interview according to categories, based on previous analysis of their text to the "why" of answers group formation, distinguishing acquisition and non-acquisition. The following examples show the meanings and categories assigned to students' texts when explaining group formation. We show, for two students, the group they made and the reasons they gave:

Category: The student groups according to the degree of similarity of the answers.

DOES NOT POSSESS RECOGNITION RULES

Student's text

First group: A_1 and A_6 because they are similar.

Second group: A_2 and A_{10} because they are equal.

Third group: A_4, A_7 and A_8 because they tell the same thing.

Category: The student groups according to the correct/incorrect criterion, with intermediate degrees

POSSESSES RECOGNITION RULES

Student's text

First group: A_1, A_3, A_4 and A_9 because I think these are the ones which are right.

Second group: A_2 and A_6. These are also right, but for me the most right are these four (the answers of the first group).

Third group: A_5, A_7, A_8 and A_{10}. These are what I think is not right.

In analysing realisation rules, categories were similarly constructed, on the basis of a previous analysis of students' answers, the mark value given, and teachers' notations to answers, again distinguishing acquisition and non-acquisition:

Category: Student values an answer (or part of it) which is out of context.

DOES NOT POSSESS REALISATION RULES

Student text

Does not answer the question, but is appropriate to another question.

Category: Students give the same mark as teacher's.

POSSESSES REALISATION RULES

Student text

For correct answers: It means the same as the answer provided in different words.

For incorrect answers: It does not make sense.

For partially correct answers: The answer is not finished, it does not tell… (student explains).

We determined the degree of acquisition of recognition and realization rules by numeric scaling of categories. We then determined the specific coding orientation of each student, for the micro-context of assessing, through a composite index from recognition and realization.

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