

# Identifying changes in teaching practice: innovative curricular objectives in classical languages and the taught curriculum

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To what degree is a Dutch curriculum reform in classics incorporated into teaching practice? This study included two data sources: questionnaires that asked teachers about their beliefs concerning curricular innovations and an analysis of authentic assessment material, i.e. school examinations constructed by teachers. The findings suggest that the curricular innovations were represented in teachers' professional rhetoric, but not in the teacher-made school examinations. This case study sheds light on a more general educational problem: the correspondence between the intended and the implemented curriculum.

## Introduction: assessment and curriculum alignment

During the last two decades, the theory–practice relationship has been investigated across various curriculum subjects. The focus of these investigations is generally on curriculum alignment or overlap, the extent to which a test conforms or overlaps with some relevant domain of interest, e.g. a curricular domain or an instructional domain. The findings from these investigations commonly show degrees of misalignment between teachers' instructional goals and their assessment practices, and between teachers' beliefs and their practices.

The centrality of assessment in the curriculum is widely acknowledged. It is *not* a neutral element in the curriculum, but lies at the heart of educational endeavour (Clarke 1996, Barnes *et al.* 2000). What is assessed determines what is taught. These issues are considered here in relation to classics, i.e. ancient Greek and Latin, in secondary education in the Netherlands. However, the case of alignment in the classics curriculum might have more general policy implications. Curriculum reform in the Netherlands has not only taken place across various curriculum subjects, but has also been coupled with changing assessment practices. School-based examinations spread over the last year of secondary education have been introduced as a part of the final examination. In this way, an

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important part of assessment is located with the teachers. This devolution of assessment responsibility to the teachers has the obvious merit of minimizing the gap between assessment and its instructional consequences, but the question is *How do teachers interpret the innovative curricular objectives?* Are these objectives represented in the teachers' assessment practices and, assuming a close connection between assessment and what is taught, are they realized in the curriculum? The alignment between innovative curricular objectives and the assessed curriculum is the main focus of this study.

### **Contexts of curriculum reform and assessment in classics teaching**

As a consequence of the changing educational climate over the past decades, a gradual retrenchment has taken place of the time spent on the classics in secondary schools in the Netherlands. Nonetheless, the classical languages, Latin and Greek, are still important subjects in the 'gymnasium' (pre-university) stream of secondary education (Greek to a much lesser degree than Latin). Curricular objectives, however, have changed. In the traditional curriculum, the teaching of Latin and Greek centred largely on translation skills. In the revised curriculum, reading comprehension has replaced translation as the core concept. The rationale for this curricular innovation is the belief that giving less attention to translation assignments should clear the way for a more sophisticated comprehension of text information than is usually shown by student translators. When translating, most attention is paid to the 'bottom' of the text, the separate constituents of a sentence and individual words; students seldom care about the 'top' of a text, and the entirety of the text, including such aspects as the connection between sentences and sections, the historical, cultural and situational context, and the broad outline. Because of this focus on the meaning of single words, student translation is like threading beads (Van Krieken 1982). The product of such a translation process is, of course, inferior.

One of the objectives of curriculum reform was that teaching should be aimed not only at the 'bottom', but also at the 'top' of a text. This objective is largely in accordance with research on reading comprehension, which has demonstrated that a (skilled) reader continually shifts from one focus to another, sometimes adopting a top-down approach, at other times moving to the bottom-up approach (Dole *et al.* 1991, Paris *et al.* 1991, Pearson and Fielding 1991). It was expected that when students' attention was less focused on translation, higher-order skills such as interpreting and evaluating instead of merely decoding should come into play.

As stated above, a school-based examination forms part of the final examination. The teachers in each school are responsible for the content of the examination in that school, because the specific function of the school examination is to enable teachers to assess teaching results that they themselves consider to be important. The teachers, however, are not given a completely free hand in constructing school examinations. An

important and, in the context of this study, relevant limiting condition in classics teaching is that the comprehension of Latin and Greek texts should be tested by comprehension questions and not by a translation assignment.

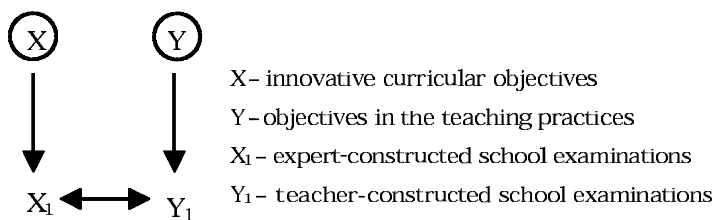
### **Research questions**

Because translation has long been the essential part of the Dutch curriculum, and is still considered a core activity by many teachers, it might be possible that teachers have not yet perceived the shift from translation to reading comprehension as a fundamental innovation of objectives, but only as a change in assessment practice. Reading-comprehension questions might mean, in the view of teachers, another form of assessment, yet an assessment of the type of comprehension demonstrated in traditional school translations. A meaningful indicator that supports this assumption is that the gradual decrease in translation assignments in final examinations during the past decades has always been hotly debated. (Over the years, many teachers have opposed the proposals of curriculum boards to diminish the role of the translation assignment in the final examination.) However, teachers were well informed about the curricular innovation in articles and reports published by the Curriculum Development Committee on Classical Languages.<sup>1</sup> In the context of our study, it is interesting to investigate how teachers have perceived this innovation. Have they become acquainted with the new objectives? Do they support these innovative objectives? Teachers' perceptions will be compared with their assessment practices. To what degree do they realize the new curricular concept of reading comprehension in their assessment practices? In that we have some doubts about the effects of documents and rhetoric on changing teaching practice, we hypothesize that teachers continue to view translation as the final goal, and that this is reflected in the kind of reading comprehension they assess. On the basis of the hypothesis, i.e. teachers pursue the same objectives they pursued in the past when translation was the core of the curriculum, the main research questions of the present study were formulated as follows:

- How is reading comprehension, as proposed in the curriculum reform, perceived by teachers?
- What kind of reading comprehension do teachers assess?
- To what extent does the kind of reading comprehension teachers assess match the innovative curricular objectives, with respect to reading comprehension?

### **Method**

Our questions centre on the extent to which reading comprehension, as assessed in the school-based examination, matches the objectives of the innovative curriculum related to reading comprehension. The comprehen-



**Figure 1. Schematic representation of the comparison of expert-constructed with teacher-constructed school examinations.**

sion questions in the school examinations were taken as indicators of the concept 'reading comprehension'.

However, what are the indicators of the innovative objectives? It was necessary to operationalize these innovative objectives and, moreover, these operationalizations had to be comparable to the indicators of the reading comprehension as assessed by the teachers. Because lists of comprehension questions reflecting the innovative curricular objectives were not available, we enlisted the aid of people who had specific knowledge of the innovative curricular objectives, namely experts involved in the innovation of the curriculum, and teaching methodologists. Nine such experts were each asked to construct a school examination in which the innovative curricular objectives were clearly visible. A comparison of these expert-constructed school examinations with the teacher-constructed ones was expected to reveal the extent to which the latter matched the innovative objectives (see figure 1).

Sixty-one teachers teaching in the final year of secondary education participated in the study.<sup>2</sup> The sample included teachers with a broad variety of experience, including some who had been teaching for only a few years and others with many years of experience.

The teachers in the sample were invited to complete questionnaires and to submit a copy of the school examinations they had constructed for the final examination. The questionnaires sought to investigate background characteristics, such as years of experience, post-graduate courses, etc., but the main purpose of the questionnaires was to investigate the teachers' beliefs and perceptions about reading comprehension and the teaching of it. In particular, the questionnaires invited the respondents to comment on the importance of aspects of reading comprehension.

As reading-comprehension questions were considered a realization of objectives concerning reading comprehension, a method was developed to distinguish two dimensions of reading comprehension. One dimension is concerned with the levels, i.e. the 'bottom' and the 'top', of the text: this text-level dimension was introduced to classify comprehension questions according to the text level aimed at in the comprehension questions. All the comprehension questions from the school examinations could be placed along this dimension in four categories, ranging from 'bottom' to 'top': single words and sentences, some closely linked sentences ('paragraph'), text, and the text in its historical/cultural/situational context. The compre-

hension questions in the categories 'text' and 'context' were considered questions that match the innovative objectives, because the curricular shift from translation to reading comprehension implies that attention is paid to the text in its entirety, and in its historical, cultural and situational context.

The second dimension relates to the skill of comprehension. As noted above, the curricular shift from translation to reading comprehension implies that reading-comprehension instruction should be aimed at more sophisticated skills than just decoding. Comprehension questions could be placed along this dimension in four categories: 'decoding', 'explicating', 'interpreting', and 'evaluating'. Questions categorized as 'decoding' are aimed at analysing text information. Questions categorized as 'explicating' are aimed at explaining text information. The comprehension covered in both categories is, as it were, objective, i.e. a pragmatic comprehension about which readers will, in principle, not hold different opinions. There is an essential difference between 'decoding' and 'explicating' on the one hand, and 'interpreting' and 'evaluating' on the other. Comprehension questions in the categories 'interpreting' and 'evaluating' are aimed at comprehension based on extrapolating, i.e. going beyond the textual information. This form of comprehension of the message of a text is, in principle, open to different options. Comprehension questions in the categories 'interpreting' and 'evaluating' matched the innovative objectives.

The two-dimensional classification of the examination questions that resulted included 16 cells into which questions could be categorized (see figure 2). The inter-observer reliability index (Cohen's *Kappa*) of the coding instrument deriving from this classification was 0.76, which can be considered satisfactory.

The study was carried out in two stages, based on two different sources of data: questionnaires and school examinations. The analysis of the school examinations consisted of four steps. The first step was to determine how the reading-comprehension questions of both the school examinations of the teachers and the 'examination' of the experts were distributed proportionally over the 16 cells of the classification. The second step was to identify a relatively small number of factors that could be used to represent the relationships among the variables. At this stage, only the teacher-

Comprehension skill	Decoding	Explicating	Interpreting	Evaluating
<b>Text level</b>				
Word/sentence				
Paragraph				
Text				
Historical/cultural/situational context				

**Figure 2. Classification instrument for reading comprehension questions. The categories of reading-comprehension 'matching the innovative objectives' are shaded.**

constructed school examinations were used. Thirdly, a comparison was undertaken between the questions reflecting a level of reading comprehension which matched the innovative objectives and which did not, both in the school examinations of the teachers and in those of the experts. At the final stage, a comparison was undertaken between the teachers and the experts in order to investigate differences with respect to the proportion of reading-comprehension questions that matched the innovative objectives and those that did not.

## Results

The respondents could indicate their degree of (dis)agreement with statements about aspects of reading comprehension on five-point Likert scales. It appeared that, for the respondents, all aspects of reading comprehension, both those that matched the innovative objectives and those that did not, were important. However, higher levels of approval were given by the respondents to those aspects of reading comprehension that matched the innovative objectives.

The result of the analyses aimed at examining the possible correlation between the way reading comprehension was assessed on the one hand, and the beliefs, perceptions and background characteristics of the teachers on the other, showed no meaningful correlation between any of these variables and reading comprehension.

In describing the results of the analysis of the school examinations, we make a distinction between comprehension questions classified on the text-level dimension as 'text/context' (i.e. matching the innovative objectives) and the questions classified as 'word/sentence/paragraph' (i.e. not matching the innovative objectives). At the comprehension skill level, we combined the questions classified as 'interpreting' and 'evaluating' (i.e. matching the innovative objectives) on the one hand, and the questions classified as 'decoding' and 'explicating' (i.e. not matching the innovative objectives), on the other.

Table 1 presents the percentages of comprehension questions classified within the combined categories. In both the teacher-constructed and the expert-constructed school examinations, many questions had to be categorized as 'decoding/explicating', and as assessing only at the word/sentence/paragraph level. Nevertheless, as table 1 shows, there are

**Table 1. Scores in terms of percentage in the school examinations of the teachers and of the experts.**

Text-level	Comprehension level	
	Decoding/explicating	Interpreting/evaluating
word/sentence/paragraph	71.62/43.47	4.36/14.56
text/context	21.99/33.56	2.03/8.41
	93.61/77.03	6.39/22.97

*Note:* The scores of the teachers are printed in normal type and those of the experts in italics.

**Table 2. Comparison between categories of reading comprehension in the teacher-constructed school examinations ( $n = 61$ ) (Wilcoxon Rank Test).**

Ranks*	$n$	$z$	$p$
Word/sentence > text/context	58	- 6.53	< 0.001
Word/sentence < text/context	3		
Word/sentence = text/context	0		
Paragraph > text/context	47	- 5.02	< 0.001
Paragraph < text/context	13		
Paragraph = text/context	1		
Explicating > interpreting/evaluating	57	- 6.43	< 0.001
Explicating < interpreting/evaluating	2		
Explicating = interpreting/evaluating	2		
Decoding > interpreting/evaluating	61	- 6.79	< 0.001
Decoding < interpreting/evaluating	0		
Decoding = interpreting/evaluating	0		

\* This column shows the + ranks, - ranks, and ties.

substantial differences between the expert-constructed and teacher-constructed tests. The proportion of comprehension questions that match the innovative objectives—on the text level ‘text/context’ and on the comprehension level ‘interpreting/evaluating’—was much higher in the expert-constructed tests. In terms of the distribution of comprehension questions that matched the innovative objectives, the experts seemed to have designed a better balanced school examination than did the teachers.

We undertook a factor analysis to identify a relatively small number of factors that could be used to represent the relationships among the variables. After rotation, we could distinguish and interpret two factors. Factor 1 could be interpreted as ‘reading comprehension that matches the innovative objectives’, because the high loading variables on this factor ( $> 0.50$ ) were related to the text/context level and the interpreting/evaluating skills. Factor 2 could be interpreted as ‘analysing on the word/sentence level’, because the high loading variables on this factor ( $> 0.50$ ) were related to the word/sentence level. So, the distinction made in theory between ‘comprehension that matches the innovative objectives’ and ‘comprehension that does not’ was confirmed by the data. We used the factors identified for a comparison between teacher-constructed and expert-constructed school examinations in the final stage of analysis.

Frequency distributions of ‘the reading-comprehension questions that match the innovative objectives’ with ‘those that do not’ in the school-examinations of the teachers and of the experts are reported in tables 2 and 3.<sup>3</sup> It appeared that, on the whole, the teacher-constructed examinations contained a significantly greater number of comprehension questions in the categories that are in accord with the non-innovative objectives (word/sentence, paragraph, decoding, explicating). In the expert-constructed examinations, these significant differences did not occur, except for the comparison ‘decoding’–‘interpreting/evaluating’, which is significant at the 5% level.<sup>4</sup> The experts constructed examinations that were more in accordance with the innovative objectives than were the examinations of the teachers.

**Table 3. Comparison between categories of reading comprehension in the expert-constructed school examinations ( $n = 9$ ) (Wilcoxon Rank Test).**

Ranks*	$n$	$z$	$p$
Word/sentence > text/context	6	- 1.12	0.26
Word/sentence < text/context	3		
Word/sentence = text/context	0		
Paragraph > text/context	3	- 0.88	0.37
Paragraph < text/context	6		
Paragraph = text/context	0		
Explicating > interpreting/evaluating	4	- 0.70	0.48
Explicating < interpreting/evaluating	4		
Explicating = interpreting/evaluating	1		
Decoding > interpreting/evaluating	7	- 1.95	0.05
Decoding < interpreting/evaluating	2		
Decoding = interpreting/evaluating	0		

\* This column shows the + ranks, - ranks, and ties.

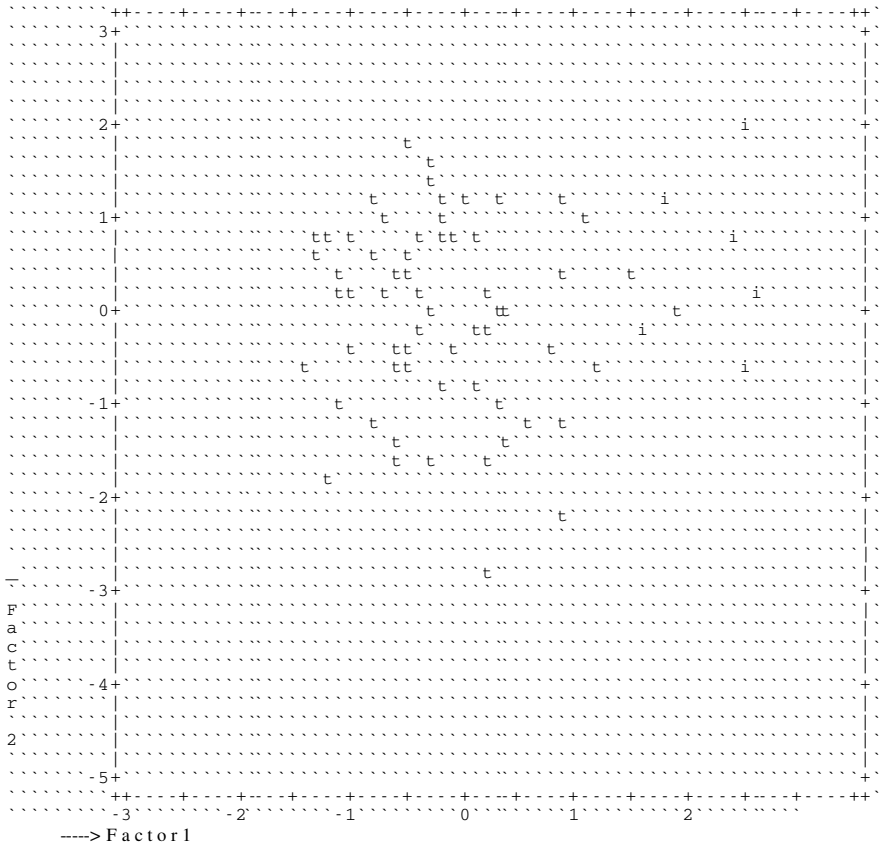
**Table 4. Factor scores of teachers and experts (Mann-Whitney test).**

Group	Factor 1	Factor 2
Teachers	$M = -0.215$ $p = 0.002$	$M = 0.036$ $p = 0.50$
Experts	$M = 1.458$	$M = -0.244$

**Table 5. Distribution of teachers and experts in two clusters.**

	Teachers	Experts	Total
Cluster 1	59	5	64
Cluster 2	2	4	6
Total	61	9	70

The final stage of the analysis centred on a direct comparison between the two groups (teachers and experts) with respect to the proportion of 'reading-comprehension questions that match the innovative objectives' and 'reading-comprehension questions that do not'. To that end, we used the factors that were distinguished and interpreted at an earlier stage of the analysis and compared the factor scores of the teachers and the experts. Table 4 shows that the experts had a significantly higher factor score on factor 1, which was interpreted as 'reading comprehension that matches the innovative objectives', than did the teachers. On factor 2 ('analysing on the word/sentence level'), teachers and experts did not differ significantly. The findings point in the same direction. Both groups, teachers and experts, paid a great deal of attention to analysing skills at the word and sentence level, but the experts paid more attention to reading comprehension 'matching the innovative objectives' than the teachers.



**Figure 3. Scattergram of factor scores. t(traditional)= member of cluster 1; i(innovative)= member of cluster 2.**

In the last stage of analysis, the structure of both groups, teachers and experts, was investigated by means of a cluster analysis. This analysis was undertaken on the scores on the high-loading variables (>0.50) of factor 1. Table 5 presents the findings: the analysis was able to divide the teachers and experts into two clusters. Virtually all the teachers belonged to the same cluster, whereas the experts were distributed over the two clusters. The teachers were, in contrast to the experts, a coherent group with respect to reading comprehension. The distribution of the experts—five out of nine experts were in the ‘teacher cluster’—was striking in this respect and mitigated the distinction made between teachers and experts based on their use of reading-comprehension questions ‘matching the innovative objectives’.

Thus, although the teachers formed a coherent group in this cluster analysis, the group was not clearly separated from the group of experts, as is seen in figure 3, which shows a scattering of scores by teachers and experts on factors 1 and 2. It appeared that the groups of teachers and experts overlapped with respect to their scores on factor 1. However, the overlap was small: on the one hand, two teachers in cluster 2 were near the group of experts; on the other hand, the five experts in cluster 1 were distant

from the teachers as a coherent group. Nevertheless, a dichotomy within the group existed. We searched for a relationship between background characteristics of the experts and membership of one of the clusters, but we could not establish one.

### Conclusion and discussion

This study explored the hypothesis that teachers may not have perceived the shift from translation to reading comprehension as a fundamental innovation in terms of curricular objectives, i.e. teachers might be pursuing the same objectives with respect to reading comprehension as in the past, when translation was the main curricular objective. The findings suggest that teachers continue to assess reading comprehension in exactly the same way as it was assessed in traditional translation assignments: they mainly assess an understanding of the surface information of a text. Thus, there is a considerable degree of misalignment between the reading comprehension assessed by teachers in their school examinations and reading comprehension as meant in the innovative curricular objectives.

However, the teachers seem to be acquainted, at least at a theoretical level, with the innovative objectives. The analysis of the questionnaires shows high approval of those aspects of reading comprehension that matched the innovative objectives. Thus, there seems to be not only a misalignment between innovative objectives and assessment practices, but also between the beliefs or perceptions of the teachers and their practices.

How should these findings be interpreted? The well-attested influence exerted by students to reduce the cognitive demands of academic tasks (Bol and Strage 1996) might be having an impact on the teaching of reading comprehension. As Doyle (1983) pointed out, students generally exert firm pressure on teachers to assign only simple tasks that minimize the risk of potential failure. Perhaps this is responsible for the finding that teachers give more attention to superficial reading comprehension. It does not, however, provide a convincing explanation for the degree of misalignment our study reveals.

We see two possible alternative explanations. Teachers, although they approve of the innovative objectives, may simply lack the skills needed for constructing reading-comprehension questions that assess higher-order skills. Consequently, they are not aware that they are assessing reading comprehension at a superficial rather than a more sophisticated level. That is, they may not realize that there is a mismatch between their beliefs and their assessment practices; they believe that they are assessing according to the innovative objectives. If that is the case, intensive *training* (post-graduate courses, summer courses, etc.) would be necessary to prepare teachers in constructing higher-order reading-comprehension questions which create closer alignment between innovative objectives, what teachers think, and what they do in practice. When all is said and done, documents and oral presentations offer a very weak approach to the introduction of a major curriculum change.

However, an alternative interpretation is that teachers' beliefs are rhetorical and that they actually may not support the innovations. If this were to be the case, and if the government and other stakeholders are still of the opinion that the innovative objectives are worthwhile, the most obvious strategy might be a greater use of assessment as a 'lever', to change not only assessment but also teaching practice (Reardon *et al.* 1994, Clarke and Stephens 1996). This would imply that the importance of teacher-made school examinations should be gradually reduced (or perhaps even abolished), and that only the national written examinations should be maintained. However, we believe that this step should only be taken when other roads prove to be impassable. There is much that is of value in teacher-made examinations. The devolution of assessment responsibility to the teacher in the school-based examination was grounded on the understanding that only the teacher can interpret the curriculum in ways that meet the needs and capabilities of his or her students. Also, as we have noted, devolution of assessment has the merit of minimizing the gap between assessment and its instructional consequences. There is, however, an enormous potential for problems in school-based examinations if such examinations are not governed by clear criteria, founded on curricular goals, and if teachers are not well trained in assessing these goals.

## Notes

1. The reform agenda in the classics curriculum included two main streams: reading comprehension replacing translation, and more attention to the historical-cultural aspects of classics. The curricular implementation of this agenda started in the middle of the 1970s with changes in the final examination and the introduction of the school examination as a part of the final examination. The implementation was completed in the 1990s with a revision of the final examination.

In addition to the communication with the teachers by means of articles and reports, teacher conferences and in-service courses were organized within the framework of the innovation. However, in addition to the 'lecturing' character of these conferences and courses, the focus was mostly on developments in the academic discipline, particularly the cultural component of classics teaching. When the curricular innovations were under discussion, the main focus was not the pedagogical implications of innovative goals, but organizational or technical questions, such as working within a limited timetable, the proportion of linguistic and non-linguistic aspects, or technical aspects of assessment by means of reading-comprehension questions. Many teachers did not participate in the in-service activities. We estimate that, at the most, about half of the teachers participated in at least one of the conferences or courses.

2. Because lists of teachers involved in the final examination were not available, a multi-stage method of sampling was used. The teachers from a sample of 71 secondary schools of a total of 355 schools with a Greek or Latin curriculum, who were involved in the final examination, were approached. The subsequent sampling led to 61 participants, of which 24 were involved in the final examination for Greek and 37 in the final examination for Latin.
3. The data reported in these tables are based on the results in all items. These results can be explained as follows. From the first row of table 2, for instance, it appears that in 58 out of 61 teacher-constructed school examinations (column *n*), the number of questions pertaining to the word/sentence level exceeds the number of questions pertaining to the text/context level. The standard score (column *z*-score), giving the number of standard

deviations above or below the mean standard deviation, is extremely low, as  $z$ -scores are usually between  $-3$  and  $+3$ . The column  $p$ -value shows that this score is highly significant ( $\alpha = 1\%$ ). The expert-constructed school examinations in table 3 can be explained in a similar way.

4. Undoubtedly, this has to do with the fact that, as mentioned above, many comprehension questions, not only in the school examinations of the teachers but also in those of the experts, had to be categorized as 'decoding'.

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