This newsletter summarizes language research in composition, writing skills, and linguistic usage carried out over a three year period (Grades 4, 5, 6) with a sample of Swedish students. Subjective assessment of student compositions was carried out. The marks from these assessments will serve as criteria in evaluating various objective measures. (CK)
Project Title: Composition in the Intermediate Stage of the Comprehensive School (FRIS)

Carried out at: The Department of Psychological and Educational Research, Malmö School of Education

Scientific leader and Investigation leader: Associate-Professor Ebbe Lindell

1. The Planning of the Project

In a previous report (School Research Newsletter 1970:3) the motives for the project and its general planning were described. We need only recall that arguments concerned with composition ranged between two poles, often denoted by pairs of opposites such as restricted-free, reality-fantasy, training-therapy, communication-creativity.

The work of documentation for the project has somewhat blighted our hopes of finding or formulating assessments which distinguish between the above-mentioned extremes. We are aiming at work which is very rich with regard to information; among other things profiled assessments have been made on an experimental basis but have shown very high reciprocal relationships (Page, E. & Paulus D., 1968).

2. Persons subject to Experimentation

The project includes a follow-up study of 3 years' duration of the
same pupils in the 4th-6th School Years. The pupils attend schools in Malmö. From certain points of view a nation wide sample would have been preferable. For other reasons we have felt obliged to reject this alternative. Work on essays and tests in connection with such essays requires direct contact between those conducting the experiments and the pupils. The selection has, however, been made with an eye to disparate social structures in the districts served by the schools. The basis of the selection has been an investigation by Swedner and Edstrand (1969). In all the sample comprises pupils of 9 classes in 3 schools. The first composition was written by 229 pupils, the tests for the school year provided data for 249.

3. The First Composition

3.1 The Subject

Intermediate stage textbooks contain many suggestions for stimulating pupils faced with composition. In the project special demands were made as to the choice of stimulus:
- all pupils should be able to write something
- an entirely free choice of subject could prove difficult for some pupils
- on the other hand, the subject set should not be of so factual a nature that knowledge could prove decisive
- in the case of a free choice, the stimulus applied should not be too binding, e.g. a series of pictures which could easily result in a fixed number of similar sentences.

In order to obtain material of interest to the pupils we studied Lindsten's (1969) registers of interesting themes. These suggest that subjects such as animals and the history of development appeal to pupils. We chose as a stimulus a picture rich in detail having a motif of this type, the cover page of a Swedish weekly magazine. Certain hints as to headings were also given but the pupils were entirely free to write their own ideas.

It is not altogether certain whether this subject was really the best choice, in the sense of that likely to yield the richest production. We did, however, observe that all the pupils did in
fact write something. Testing different types of stimuli will be the subject of later experimental studies. These, however, will prove more reliable after this year's investigation has provided us with information as to the measurements which can be applied for objective evaluation.

3.2 Marking

A subjective assessment of the compositions in their entirety has been carried out. The marks will serve as criteria in the evaluation of various objective measurements. According to Björnsson (1960) at least 3 assessors are necessary to attain over 0.90 reliability. Marks awarded by lecturers in methodology and education are at present available, while marks awarded by intermediate stage teachers are being collected. The lecturers show high mutual reciprocity, between 0.70 and 0.75.

3.3 Objective Measurements direct from Compositions

It would be an advantage if objective measurements could be obtained from the pupils' compositions without its being necessary to make use of subjective assessments and without recourse to analyses requiring expert treatment. The investigation referred to above by Page & Paulus affords encouragement on this point. In weighing up a number of quantitative measurements taken from the compositions it proved possible to obtain the same degree of accuracy in assessment as is achieved when independent assessors award marks. Among conceivable measurements may be mentioned:

- Total number of words
- Number of different words
- Number of different punctuation marks
- Length of sentences, median value and standard deviation
- Length of words, median value and standard deviation

Some twenty measurements of similar type can be determined. By means of correlation calculations between these on a reciprocal basis and using marks as criteria, it is possible to work out simple and multiple correlations.
3.4 Linguistic Analysis

The analysis of lexical and syntactical phenomena is based on Teleman's suggestions (1971). A schedule for analysing errors has been worked out by Hultman. The work involved is performed with the aid of special forms and an extensive system of symbols. We do not intend to give examples of these things here but instead we cite an extract in clear showing what the analyses will lead to (the example has not yet been treated by linguists and it is possible that the terminology will be amended).

<table>
<thead>
<tr>
<th>Swedish Text</th>
<th>English Text</th>
<th>Lexical Analysis</th>
<th>Syntactical Analysis</th>
<th>Analysis of Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>En</td>
<td>One</td>
<td>indef. art.</td>
<td>advb of time, art.</td>
<td></td>
</tr>
<tr>
<td>dag</td>
<td>day</td>
<td>sub</td>
<td>advb of time</td>
<td></td>
</tr>
<tr>
<td>sa</td>
<td>said</td>
<td>vb, pret.</td>
<td>finite vb</td>
<td></td>
</tr>
<tr>
<td>läraren</td>
<td>the teacher</td>
<td>sub, def.art in</td>
<td>subj.</td>
<td></td>
</tr>
<tr>
<td>(bisats)</td>
<td>(clause)</td>
<td>that-clause</td>
<td>acc.obj.</td>
<td>comma missing</td>
</tr>
<tr>
<td>att</td>
<td>that</td>
<td>conjunction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>vi</td>
<td>we</td>
<td>pers. pron.</td>
<td>subj.</td>
<td>spelling mistakes</td>
</tr>
<tr>
<td>skole</td>
<td>should</td>
<td>vb, pret.</td>
<td>finite vb</td>
<td>- change vowel,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>add consonant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(skulle)</td>
</tr>
<tr>
<td>gå</td>
<td>go</td>
<td>vb, ing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>till</td>
<td>to</td>
<td>advb of place, prep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>museumet</td>
<td>the museum</td>
<td>sub, def.art in</td>
<td>advb of place</td>
<td>word formation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>post-position</td>
<td></td>
<td>(museet)</td>
</tr>
</tbody>
</table>

Observe that punctuation marks are given lines of their own. Certain additions are made to the text, in the case above with reference to the clause. A very large number of measurements and combinations of
measurements are possible by means of analyses of this type. It has
not yet been decided what measurements will be chosen and it is also
probable that the first processing will lead to the introduction of
fresh ideas.

3.5 The Evaluation of Objective Measurements

It is of importance for the future work of the project that it should
prove possible to replace marks by objective measurements. It would
probably be to the advantage of the daily work of the school if such
measurements could be indicated. Preliminarily, however, assessments
by teachers must serve as criteria.

Before selecting measurements the following points of view may be
noted:

1. Which measurements are reliable? It is likely that a certain
frequency is required before a measurement can be used. Individual
constructions can vary from essay to essay by the same writer.

2. Face validity must be noted. Even if characteristics such as
spelling and handwriting correlate positively with the criteria,
it is open to discussion whether they should be included in the
assessments. Or should this be done with respect to training in
writing, which can well be applied to both correct spelling and
neat handwriting?

3. The measurements should be chosen with a view to the teacher's
contribution. One motive for this project is to provide teachers
with more and increasingly objective measurements, but these should
not be too complicated to draw up.

4. The measurements should be chosen so that the pupils may be
guided by them. A measurement such as the length of the composition
would thus be unsuitable, whereas measurements such as the length of
sentences and variety of words would be preferable from the point of
view of instruction.
5. Are combinations of subjective and objective measurements suitable? Calculations made for the purposes of evaluation imply for the most part correlations on the one hand between the objective measurements reciprocally, on the other with the mark criteria. By objective measurements we mean both those taken directly from the compositions as well as those obtained by means of the linguistic analyses. Other ways of obtaining multiple correlations with criteria will also be employed.

4. Tests

4.1 Content of the Tests

The tests make it possible to survey certain hypothesis with respect to the pupils. Furthermore, the compositions provided some information on difficulties experienced by the pupils in dealing with the language. These difficulties could be investigated more formally by means of the tests. We decided to concentrate on problems concerned with language teaching in the case of the 4th Year pupils. The schedule followed in field work gives a survey of the content of the measurements.

First Day

First Period:

Berhagen's intelligence test: series of pictures, filling up, classification, puzzles, linguistic analogies.

Second Period:

Style test A(djectives), Parsing, Attitudes in accordance with Likert Scale.

Second day

First Period:

Grammatical correctness and Outline in accordance with older standard
Second Period:

Command of vocabulary A(djectives), Style test V(erbs), Attitudes in accordance with comparisons of pairs.

4.2 The Relation of the Tests to the Compositions

Both collections of data make it possible to compare passive proficiency according to the tests with active proficiency according to the compositions. Such points of comparison are to be found in, for example, variety of vocabulary, grammatical correctness and parsing.

We are planning investigations to analyse factors in the choice of measurements. Conventional tests as references to the interpretation of factors would facilitate the definition of factors.

Attitude tests will be subjected to a separate factor analysis, which in its turn can indicate some aspects of personal disposition to composition.

Before we undertake further experimental investigations the tests make it possible for us to maintain essential hypothesis under control.

5. Differential Investigations

As mentioned under "Persons subject to Experimentation", the schools taking part were selected with a view to ensuring that the pupils should have different social backgrounds. In the investigations concerned with the analysis of variance some of the causes of variance will therefore be social background and intelligence, possibly also sex. In a recently published work (Turner & Mohan, 1970), mention has been made of a series of possibilities of replacing by objective measurements certain of Bernstein's observations of linguistic usage in different social environments.

During the ensuing academic year emphasis will be laid on experimental investigations of the importance of different types of stimuli for written composition. The interesting causes of variation will then constitute "subjects".
References:


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