One of the most difficult problems facing researchers on writing is to define writing as a construct. The way writing is conceptualized determines how writing assignments are created and how written products are analyzed and rated. A functional approach to defining writing as a construct is presented here. It begins with the overall construct of writing activity and divides it into writing competence and writing preferences. Writing competence is defined as consisting of discourse-constructing competence and text-producing competence. Discourse-constructing competence consists of cognitive competence (idea generation and organization) and social competence (norm awareness). Text-producing competence is defined as consisting of linguistic competence and motor competence. A brief bibliography is included. (MSE)
WRITING AS A CONSTRUCT

SAULI TAKALA
University of Jyväskylä

ABSTRACT

One of the most difficult problems facing researchers who study writing is how to define writing as a construct. The way writing is conceptualized determines how writing assignments are set and how written products are analysed and rated. The article presents a functional approach to defining writing as a construct. It starts from the overarching construct of writing activity and divides that into writing competence and writing preferences. Writing competence is defined to consist of discourse-constructing competence and text-producing competence. Discourse-constructing competence consists of cognitive competence (idea generation and organization) and social competence (norm awareness). Text-producing competence is defined to consist of linguistic competence and motor competence.

1. Some basic issues in research on writing

Several problems have occupied researchers who have been working on the teaching and assessment of writing. They include the following:

(1) How can writing ability be defined?
(2) Is writing ability one unified construct or can it be measured by measuring its different components?
(3) If writing ability is measured by way of components, how should they be weighted, if at all?
(4) How can good writing tasks be constructed?
(5) How can valid and reliable rating methods be developed?

In this paper I will deal with the first two questions. My interest in the construct of writing stems from my involvement for the past five years in the IEA International Study of Written Composition. It is study of students' achievement in writing in fourteen countries. One of the main concerns in the study has been the curricular validity and content representativeness of the writing tasks (for a discussion of these issues, see Vähäpassi in this volume) and the construct validity of the measures (scores) derived from the student responses to those tasks. Thus our main
Interest has not been similar to the recent discussion of the structure of foreign language competence (e.g., Hughes and Porter 1983), in which it has been debated whether there exists only one undivisible, unitary, one-dimensional language competence or whether there are several dimensions. While we were aware of this debate, as an activity it seemed to lack ecological validity itself. It seemed to be too narrowly psychometric and incorporating a too simplistic psychological view while paying far too little attention to the sociological nature of language use. Applied to our case, to do interesting and useful research on writing, it seems necessary to take full account of the functions of writing and of the tasks of writing, of the strategies and processes of writing and of the products of writing and, finally, of the readers of produced texts.

2. A model of the construct of writing competence

The validity of writing assessment can best be addressed in terms of construct validity, content representativeness (or validity), and curricular validity. Since we do not have any clear notion of the psychological structure of writing, i.e., how general or how task specific it is, construct validity can best be guaranteed by an analysis of the general features of writing situations and a resulting defensible specification of the domain of writing tasks. This is a functional approach to construct validity. It was used in the IEA International Study of Written Composition. In other words, since it is not easy to say directly what writing ability consists of, we chose to look at what functions writing has in general and in what situational contexts it occurs. This means that we have focussed on the initial conditions of writing and on its functions. This approach is derived from ideas expressed by de Saussure and Wegener1 and further elaborated by Gardiner in The Theory of Speech and Language (1932) and by Jakobson (1960). The Finnish language scholar Rolf Pipping has dealt with similar topics in his Sråk och stil (1940), where he shows how styles are related to the relationships between the three extralinguistic factors (speaker/writer, listener/reader, topic) and the linguistic factor (text).

Another, complimentary approach has been more genetic. In other words, we have attempted to sketch the initial conditions that lead to a final product through a sequence of events (writing processes).

1 Wegener strongly emphasized the influence of the speech situation on the form of the linguistic expression.
Much of the discussion on language teaching and language testing seems to neglect ecological validity. As suggested above, language teaching and testing need to take a broad view of human activity, i.e., to place language activities within the broader context of general human activity and purpose. It is important to consider what the constants, parameters, and variables of language use are. Roughly speaking the constants are: sender/addressor, receiver/addressee/audience, topic, channel, and text. The parameters represent the sets of 'values' from which a number of factual characteristics of the constants can be derived (e.g., the identity of the writer and audience, the purpose of writing, assumed background knowledge, the perspective from which the topic is dealt with, etc.; for a more detailed discussion, see Purves et al. 1982). The variables are the modes of organization and the use of rhetorical and linguistic resources, which are influenced by the parameter configuration but which can still vary quite freely.

The present author made an attempt to define writing as a construct in a manner which draws on the findings of modern cognitive psychology concerning discourse comprehension and builds on the discourse theory itself. The system developed can be summarized in a diagram (Figure 1) as follows (Takala 1983, 1985).

'Writing competence' or 'writing ability' can be operationalized as an ability to produce texts that cover the cells of the domain of writing (Vähäpää 1983). A person may be able to write fluently a given type of discourse (e.g., a story, a personal letter, an academic paper). Such a person may thus appropriately be called a competent or fluent story-writer, or letter-writer, but it is less clear if we can appropriately refer to him or her as a competent writer; the competence seems to be too limited to justify the epithet. To deserve the denomination of a competent writer, he needs to be able to write across a large range of tasks.

Writing competence, as a theoretical construct, can be argued to consist of two main components: discourse-structuring competence (or discourse-producing or rhetorical competence) and text-producing competence.

Discourse-structuring competence requires both cognitive and social competence. Cognitive competence refers to the cognitive ability to encode meanings and intentions effectively. It denotes the ability to generate discourse in which the units of thought and the units of language are related to each other in such a way that an appropriate structure of meaning is produced. The appropriateness is always dependent on the
Fig. 1 Scheme used in the IEA Writing Study for creating the scoring scheme.
intention of the writer and the nature of the intended audience as well as the topic dealt with: appropriateness is not a universal concept, it is always context- and situation-specific.

It is important that the writer is able to present ideas which are perceptive, relevant and clear for the audience of writing. This can be called (the ability of) idea generation. However, this is not sufficient. The ideas must also be arranged in a consistent and coherent way, so that a discourse type is recognized and the text is made intelligible. This can be designated as (the ability of) idea organization. It is not immaterial how the meaning is organized in a linear text. Ease of comprehension is usually better if the two coincide. It has also been shown (Brewer and Lichtenstein 1982) that events in a story have to be arranged in a certain order for the story to produce either suspense, surprise or curiosity in readers. Readers have genre-structural knowledge, and they expect sufficient conformity with typical genre schemata. Similarly, discourse has to be structured differently if the type of text to be produced changes from narrative to persuasion, to description, or to exposition.

Since writing is usually addressed to an audience other than self, discourse-structuring competence also presupposes social competence. The writer has to be aware of audience expectations (norms) and use an appropriate tone and style.

Text-producing competence can be divided into two parts: linguistic competence and motor competence. Linguistic competence consists of the ability to produce sentences using appropriate grammar, spelling and punctuation. Motor competence refers to the ability to produce an easily legible text.

In the IEA International Study of Written Composition both the overall impression and analytic ratings (cf. Figure 1) are used because they are complementary procedures, not mutually exclusive. The analytic ratings do not necessarily add up to the general impression, while more specific information is obtained if analytic ratings are also made.

The use of the same rating categories in all tasks is justified since content, organization, style, and linguistic correctness can all be distinguished in all discourse (perhaps their configurations do in fact define the range of text types), and the rater also tends to make an overall quality estimation. It has to be emphasized, however, that the specific meaning of each category is defined task by task. To take an example, the content clearly varies task by task, and the organization of a story is different from the organization of a reflective essay. As was stated above, even
within the story genre the sequence of events has to be arranged in a different order depending on whether the aim is to bring about a response of suspense, surprise or curiosity in the reader. There is no a priori reason to assume that a writer automatically masters such discourse-organization skills. On the contrary, it is more likely that all these story organization patterns have to be learned through examples and through practice.

Similarly it is possible that the grammatical, punctuation and spelling skills vary from task to task to some extent. Different genres call for somewhat different types of syntactical structures (Perera 1984).

3. Other conceptual systems

Several systems have been proposed to be used in the evaluation of student writing. Many are based on long pedagogical traditions, but some are based on empirical studies. Perhaps the best known analytic scoring system is the one developed by Diederich (1974). The Diederich scale was developed empirically by using factor analysis. A sample of writing was scored by experts representing different disciplines. The factors extracted were: ideas, organization, wording, flavor, and mechanics. The last category is sometimes sub-divided into usage, punctuation, spelling, and handwriting. Each factor is rated on a scale from 1 (low) to 5 (high), and ideas and organization are rated on a scale from 2 to 10 (i.e., they receive a double weighting). Thus the scores can vary from 10 to 50.

Another example of an analytic scoring method is given by Quellmalz (1979). She defines an expository scale consisting of general impression, essay focus/main idea (the subject and main idea are clearly indicated), essay organization (the main idea is developed according to a clearly discernible method of organization), support (generalizations and assertions are supported by specific, clear supporting statements), and mechanics (the essay is free of intrusive and mechanical errors).

4. Conclusion

The IEA International Study of Written Composition offers a very good opportunity to test the developed model of writing as a construct. Fourteen different school systems (countries) representing a number of lan-
guages and cultures provide a vast corpus of student scripts, which have been scored using the same rating procedure. It remains an empirical question to test how general or specific writing ability is across age levels, across cultures, and across languages.

LITERATURE


Wegener, H. 1885. Untersuchungen über die Grundfragen des Sprachlebens.