Different approaches to comparative mother tongue education

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School, language and multi-cultural society
Most people outside universities like most scientists inside the universities are convinced that pedagogy or education is just the same as teacher training. Most people in the humanities know by now, that there might be more one should consider.

Though it took them some time, by now most people in education itself have a vague idea, what comparative education might be. Nevertheless the difference between comparative education and international education is still considered a question to discuss.

But less people in education agree on the meaning of the term mothertongue education: some are restricting its meaning to the teaching of the vernacular in the surrounding of another language, others refer by this term to a minority language, a third group denotes by this term the teaching of the mainstream language to native speakers of this language only. But usually there is one point on which most of the people giving these contradictory definitions agree: they are dealing with something special, not comparable at all; it might be possible to compare structure, methods, tools, and achievement in foreign language learning, mathematics and science but not in such a sensitive field like mothertongue education.

I am sure that all these different definitions picture the dominating situation in the respective countries the people using them come from, and I am conviced that they themselves are evidence of the fact that only by comparing these situations one can push forward the boundaries of knowledge of this field without being hindered by prejudice.

To compare situations one is in need of a certain set of comparable elements, e.g. those provided by empirical methods.

Therefore I shall try to give some examples for the application of different empirical approaches to research in comparative mothertongue education.
STRONG AND WEAK POINTS IN APPLYING EMPIRICAL METHODS IN COMPARATIVE MOTHER TONGUE EDUCATION

In the second edition of the Handbook of Research in Teaching, edited by Gage, comparison as method was mentioned just two times, referring to the numbers of female and male teachers in different countries and to the social background of pupils at different stages of schooling.

In the parts on reading and "writing and literature" there was no reference to other countries. There was no reference to comparison as method.

This situation has changed in the meantime. As far as I can see there are by now two main streams of comparative approaches to the research on mothertongue education.

The first I should like to describe as a more quantitative one, using large samples and striving for the testing of hypotheses internationally agreed upon. As an example I shall use studies of the International Association for the Evaluation of Educational Achievement, the IEA.

The second approach makes use of more anthropologic-qualitative methods. As an example I shall refer to the work of the International Mothertongue Education Network, known as IMEN.

Experiences from IEA studies

IEA is trying to identify those factors which account for differences between countries, between schools, and between students and to offer advice to politicians, educationalists, and teachers.

Usually an IEA study needs three to five years of work by the delegates from different countries to agree upon the research questions, to construct measures of performance, to identify age groups or populations to be tested, and to develop the instruments. These include multiple-choice, open-ended and fill-in items as well as study specific forms, such as written compositions of different formats. In addition background questionnaires are developed to be filled in by pupils, teachers, school-principals and sometimes experts in the field and parents.

Most often a cross-sectional survey is used to describe the teaching in the field at a given time. Probability samples are drawn on school, classroom
or student level. The applied sampling procedure, the resulting standard errors of sampling and design effects for important variables are documented.

As early as 1966 the IEA included in its sex-subject-study two fields related to mother-tongue education, i.e. "Reading comprehension" testing reading comprehension, word knowledge and reading speed in 15 countries or educational systems¹ and "Literature", where besides comprehension and interpretation as well the preferred response to literature was in the focus of interest in ten countries². The actual testing took place in 1970. The international report on literature was given by Purves in 1973 and for reading comprehension by Thorndike in the same year.

Between 1978 and 1983 the International Study of Achievement in Written Composition was developed for three populations in 14 countries³ and piloted. The testing took place in 1985 to 1986.

The third mothertongue related study of the IEA was launched in 1987: Reading Literacy Study, with a participation of 30 countries. The testing took place in 1991 in two populations, the research questions being the reading achievement at the primary and the secondary level, a comparison to the previous IEA Survey, the impact of goals and assessment, materials and teaching on the achievement, the influence of home literacy activities and values.

My personal impression from my participation in the Written Composition Study and the Reading Literacy Study as chairman of the National Study Committee is that internationally and nationally the studies are prepared with utmost precision, that the results are highly reliable and allow valid conclusions from the achieved samples to the populations tested.

¹ Belgium (Flemish and French), Chile, England, Finland, Hungary, India, Iran, Israel, Italy, the Netherlands, New Zealand, Scotland, Sweden, and the United States.

² Belgium (Flemish and French), Chile, England, Finland, Iran, Italy, New Zealand, Sweden, and the United States.

³ Chile, England, Finland, Germany (Hamburg), Hungary, Indonesia, Italy, the Netherlands, New Zealand, Nigeria, Sweden, Thailand, The United States and Wales.
Critics might ask, what the benefit of the advantage of these international studies might be in comparison to national ones. I observe advantages on three levels:

1. During the preparation phase in the discussions of the International Steering Committee and the International Project Council the first surprising discoveries were made by almost all participants: the areas of mothertongue education and its subdisciplines were not at all congruent in the different countries. Content fields were included or missing or dealt with in other subjects; methods and stimuli differed between countries or were totally unknown in others. Even at this early stage the researchers could benefit from the experience of their colleagues and became motivated to introduce new aspects into the traditionally stable situation of their countries’ mother tongue education.

2. The results of the main studies displayed their most interesting implications only when compared to the results from other countries. Let me give you my favourite example. In the study of Written Composition our German team was ever so happy, when we discovered after analysing the German data, that only 2% of our pupils gave the advice to write what the teacher likes to read, and only 1.9% suggested to cite and refer to authorities. A mere national interpretation of these facts would have suggested that German students are emancipated and no longer dependent from authorities. But looking at the results from other countries brought us back to reality. In all the other participating countries these suggestions were not as common as in Germany: the runner-up were the Netherlands’ pupils, of whom 0.3% and 0.4% respectively gave these advices.

3. The material collected in these studies can be used for cross-national reference, as a benchmark against which to judge national achievement. Its high degree of objectivity, guaranteed by the international design of the study, prevents it more than national studies from political or economical influence from the research question to the presentation of results. Therefore it gives evidence for long-term suggestions for the reconsideration, changing or restructuring of the curriculum. But the main disadvantages this approach has in my view shall not be concealed:
   - the comparatively high costs of the study;
   - the dependency from official permission to do such a research, with all the problems of prerequisites to fulfil and guarantees asked for;
   - the tendency to lean back and relax when the quantitative analyses are done; the tendency to feel fed up with the respective content area after
7 years of dealing with nothing else like, let's say, composition. This leading to
- the temptation to be content with the statistical results and not to care about the individual case. The tendency to leave the huge amount of content holding material untouched, looking for the chance to apply the knowledge gathered in another field;
- the pangs of conscience of not being able to do all with the material it deserves;
- the comparatively long time till results reach the individual teacher in the classroom.

Experiences from IMEN studies

For the International Mother-Tongue Education Network, IMEN, research on mother-tongue education is not just one amongst other fields its members are interested in, but the central issue. IMEN is aiming not primarily at the achievement but at the roots of mother-tongue education, it is trying to overcome the self-content behaviour, that is taking the everyday way of teaching as a matter of course, and to sharpen the awareness for the nationally determined definitions of mother tongue education and for the culture specific construction of national curricula, and to contribute to possibilities to broaden or renew current definitions of mother-tongue education.

To reach these aims, IMEN starts a research by a systematic description and analysis of developments in the theory of MTE in the countries under question, mainly on the basis of documents; this is followed by a systematic description and analysis of practice of MTE, mainly on the basis of teachers' diaries and "portraits" of the subject. This phase usually needs two to three years. A case study research is used to build up an ethnographic corpus that is used for further analysis.

Since I joined IMEN I took part in two projects: a comparison of the situation in Finland and Germany, and the CSFR and Germany, with case studies in Hamburg, Helsinki and Prague, focusing on literature education and the use of writing in senior secondary schools. I observed the following advantages:
- the same benefits as noted when discussing the IEA concept, i.e. the awareness for differences, etc.;
- the time and possibility to discuss in detail and depth features noticed in the actual classroom with teachers, students and fellow researchers;
- research can be done on a comparatively low budget;
- it turned out to be quite easy to gain access to schools. Usually the permission granted by the head of the school and the teacher was sufficient to have a chance to convince the students to cooperate;
- the direct chance to analyze and interpret the collected material without being forced to wait for a statistical analysis to be completed;
- the possibility of immediate influence on teaching behaviours and strategies in the respective setting;
- the feeling or even certainty of students and teachers to be subjects and not objects in the research process.

On the other hand disadvantages have to be taken into account which for some people might be threatening:
- it is by no means granted that the observations are representative for the situation in a given country. As to this one has to reply on the subjective judgement of the fellow researchers. Their impression is the only safe-guard against the intentional of accidental presentation of an untypical class;
- the tendency to be content with the observation when it fits into the pictured situation;
- the possibility to over-generalize the findings.

TYPES OF EMPIRICAL APPROACHES TO EDUCATIONAL RESEARCH

The two examples given stand for two types of empirical approach: the qualitative and the quantitative. To be able to judge on the usefulness for the comparative study of mother-tongue education one should try to visualize their main features.

For many years the differences and weak and strong points of the approaches and ways overcome the antagonism were discussed in educational literature, e.g. in the "Educational Researcher" of the AERA, most of them replicating or paraphrasing the debate documented in 1979 by Cook and Reichardt.

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The Qualitative Approach

interpretative-qualitative, interpretative-ethnographic:
Source: anthropology

- Research that focuses e.g. on teachers' and students' thought processes and meaning-perspectives.

- "Pedagogical content knowledge" Shulman, 1987\(^5\). Content specific ways in which teachers understood, formulated, presented, explained, and discussed the content being taught. alternative (non-positivist) epistemologies even they need some means of validation or means of persuasion. Berliner, D. 1989, Salomon, G., 1991\(^6\), subcategories are amongst others

The Antinaturalistic Approach
Tom, A. 1984\(^7\), considering methods of the natural sciences inappropriate for the social sciences.

The Interpretivistic approach
Focussing on the phenomenological perspective of the persons behaving. Behavioral uniformity are seen "not as evidence of underlying. Essential uniformity among entities, but as an illusion - a social construction" Erickson, 1986, p. 126, after Gage 1989 p. 5.


\(^7\) Tom, A., 1984, Teaching as a moral craft. New York, Longman.
The cultural compatibility hypothesis - backed by Goldenberg, C.N., Gallimore, R., 1989.8

the phenomenological approach
the constructivistic approach
the approach of the symbolic interactionists
the hermeneutic approach.

I am mentioning this set of approaches first, because ethnology is from its roots a comparative discipline, comparing human cultures, and it is just normal to apply its methods on comparing that part of culture, where cultural traditions, value systems and convictions are handed over from one generation to the next: the school systems of a society. In our case especially in the field of mothertongue education, where complex concepts of meaning, human relations and understanding of the surrounding world are turned into words and words in literature and other means of communication.

The sociological ethnographic studies referring to small scale micro-studies of the school or the classroom can trace their roots to convincing strong ancestors. It is evermore surprising that its legitimacy was always under discussion. Even qualitative researchers themselves felt the need to defend themselves and utter warnings to beware of "blitzkrieg ethnography".9

The Quantitative Approach

Source: psychology.
Often wrongly labelled "positivist", positivist epistemologies, objective-quantitative process-product research; universalistic hypothesis cf. Goldenberg and Gallimore.


The quantitative approach has a long tradition in social sciences, actually due to this approach many people justify the use of the term scientific in connection with these fields of study. Applying value systems that had been developed for natural sciences to areas of the humanities gave a new basis to research and insight. Finally there was evidence and not only philosophical conviction.

Data can be measure in exact terms, or at least seem to be measurable in such a way. Critics claim, they just pretend to be exact. Of which type of scale is for example the scale on which students are graded? Nominal, ordinal, interval or relational? The research design is planned in such a way as to exclude subjective inferences and to be as precise as possible. The phases of the formulation of research questions and hypotheses, of the specification of the research design and the statistical procedures, of data collection, of data analysis and writing-up are clearly separated.

The analysis of results checks whether the initial hypotheses are backed or dumped, but as well whether new relationships emerge from the results.

The Approach of the Critical Theory

Source: analyst from economics, political science, and sociology. We should have been looking at the relationship of schools and teaching to society - the political and economic foundations of our constructions of knowledge, curriculum and teaching. All others, positivist - using scientific methods - and interpretativist - exploring social constructions of reality, had been more or less trivial.

What is needed a reconsideration of the whole structure of society in which education, including teaching, goes on.

The Analytic Approach
capitalizes on precision.

The Systemic Approach
capitalizes on authenticity.
COMMON FEATURES TO ALL OR MOST APPROACHES

The first two approaches as almost all related to them in spite of the obvious differences share at least three common features, when applied in education and over all when applied in comparative mother tongue education:

All need some validation

What holds true for Comparative Education in general, the difficulty to agree on the terminology before a successful work can be undertaken, turns out to be an even more crucial point in CME. When comparing systems, after the definition of the terms for the units of analysis, the variables and the background features, the work can proceed. The same holds true for the comparison of structures, contents or achievement in mathematics or in science (at least the results of calculations should coincide), in foreign languages (the vocabulary or the source or target language versions should be the same).

As the otherwise shared basic feature, the common object of analysis, is just the element the absence of which is the first to be noted in CME the need for other validation is urgent. How can we prove that what we are measuring is really what we are claiming to measure, when not only the object but also the basic tools (the languages again) show such a clear difference? Therefore, no matter whether we are using methods one can call more qualitative or more quantitative, we are obliged to prove their validity. Therefore uttermost diligence has to be applied in trying to describe the prerequisites of the necessary procedures in such a way, that in spite of the different languages, we can be as sure as possible that we are trying to analyse the feature with an adequate tool, giving us insight into differences between school subjects and not only between languages.
All face the need for some standards of quality\(^{10}\)

The fit between research questions and data collection and analysis techniques

No matter whether you are a dedicated follower of one or the other approach you have to make sure that your research question is determining your techniques of data collection and analysis and not vice versa. Especially when working together with colleagues from another nation and another research tradition one has to be aware of the possibility that long established traditions of how to approach a research question are considered to be the only adequate. A typical pattern from MTE: spelling has to be checked on a quantitative basis; composition has to be evaluated on a qualitative basis. Be sure all participants agree on the assumed standards.

The effective application of specific data collection and analysis techniques

You need a basic competence to collect and analyze data successfully. This might comprise the knowledge and experience of how to conduct an open interview, how to apply a test or even how to operate a tape-recorder.

Alertness to and Coherence of Background Assumptions

Only contact from people to other cultural traditions give you a chance to become aware of your dependance from your own internalized and never questioned assumptions and subjective convictions. Open discussion gives you a chance to overcome prejudice. Examples: "Children under 7 are too young to learn how to read and to write". "In senior secondary we do not deal with the teaching of basic techniques but with the transmission of value systems from one generation to the next." etc...

Overall warrant

Especially in MTE the boundaries of the subject are all but clear. Their are connections to many neighbouring subjects, influenced by and influencing MTE as well as topics included from almost all fields you can

think of. The same holds true for CME, and all these fields have their own and special ways for handling research problems and even when they are not familiar with those applied in CME it is more likely that results are accepted by them when the arguments by which certain theories and assumptions are rejected and by which ill-fitting data are dealt with can be explained in detail.

**External and Internal Value Constraints**

We are always under obligation to answer the question from outsiders, whether all our research is really worth the effort. We should be able to answer the "also what" question with explicit information on the value of our findings for educational practice. "The students in country X read less novels than ours." - so what?
"They know the biography of 500 authors by heart." - so what?
"They have double the amount of mother-tongue instruction than ours." etc.

In addition we have to adhere to research ethics. In our case that means to take into account the self-esteem of the students as well as long-term effects on the knowledge, behaviour and social chances of the students. Offering them a task that is by far to complicated for 99% is offending the internal value constraints as it might hurt the self-esteem of the students. Showing the students in country Y that opposing the teachers is considered a sign of independent thinking and valued highly in country Z, might lead to severe difficulties.

**Need for some means of facilitating generalizability**

Finally all approaches should be interested in the question whether their findings are only valid in this one and only case or under which conditions one can assume a wider generalizability, be it inside one educational system or across the borders. (Introduction of attitude scales)

**A DECISION MODEL**

Taking into account the number of fields, where the different approaches overlap, it should become overt that there is no necessary
antagonism between the quantitativists and objectivists, the qualitativists and interpretativists, and the critical theorists\textsuperscript{11}. (Gage, 1989, p. 7).

The different approaches fulfil specific task in the strive for a sounder understanding of the situation in MTE. The decision for the predominant or secondary use should be made according to the research question, one's own expertise and the availability of tools and funding. As a thumb rule I suggest the following model:

Assuming that there really is a difference between methods and didactics the lines developed give the impression that for research on methods the qualitative approaches are the most useful, for information concerning the didactics the quantitative.
Decision diagram

Individual Research Interest

Common Research Experience  NO can be developed  NO

YES

Agree on Internal Value Constraints  NO

YES

Understand each others background ass  NO

YES

Can you agree on your research questions  NO  EXIT

YES

Are you content with answers from theory/lit.  YES

NO

See a chance to learn from empirical research  NO

YES

Do you have a chance to cooperate with teachers  NO are your questions apt for qualitative analysis

YES

Decide for qualitative approach according to your competence

General Data collection

Analysis

257
(Triangulation)

Are you interested in generalizability

YES

NO

Do you want to convince legislators

YES

NO

Are you interested in quality in-depth research

YES

Funding available

NO

YES

Permission obtainable

NO

YES

Do focussed data collection according to approach

Analyze Data

Interpret Data

Can you answer "so what ?" question

YES

NO


