

Different Approaches to Comparative Mother-Tongue Education (CME)

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Abstract

Researchers in Comparative Mother-Tongue Education are faced with the growing necessity to overcome language, culture, and school system barriers to understand the role of the subject they are dealing with in a multicultural worldwide society. On the basis of personal experience this article lists some of the advantages and disadvantages of quantitative and qualitative studies in CME, lists basic requirements for empirical studies in this field and offers a model to show the interdependency between the researcher's subjectivity, objective research competence and the research question; also a second model to guide the decision process leading to a specific approach is presented.

1 Introduction

Most people outside universities, like most scientists inside the universities, are convinced that pedagogy or education is the same as teacher training. Some people in the humanities are now aware that there might be more one should consider. Though it took them some time to reach this point, many people in education itself have - or claim to have - a vague idea about what comparative education might be. Nevertheless, the difference between comparative education and international education is still considered a question worthy of discussion.

Less people in education agree on the meaning of the term mother-tongue education (ME): some restrict its definition to the teaching of the vernacular in the surrounding of another language, others use it to refer to a minority language, a third group denotes by this term the teaching of the mainstream language to native speakers of this language only. Usually there is one point on which most of the people giving these contradictory definitions agree: they are dealing with something special, not really 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 ME.

I am sure that these different definitions reflect the situation prevalent in the respective countries the people using them come from, and I am convinced that they themselves are evidence of the fact that only by comparing these situations can one 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. The standard argumentation I am confronted with when talking about CME is "Where do you find such elements? The languages differ, the literatures differ, communication patterns differ. You cannot compare results of the

- teaching of rules like in math,
- understanding of processes like in science,
- knowledge like in geography,
- competence like in foreign language learning."

It usually takes some time to convince the critics, if I succeed at all, that you actually can compare:

- how many of the most frequent n (being any number you like) words the pupils can spell right, according to the rule they were taught;
- how well they understand the sequential patterns of the most common or rarely used forms of oral or written communication in their society;
- whether they are able to cite names of authors, titles of books or use the right names for linguistic or literary phenomena;
- whether they have mastered the competence to use required speech variety or pragmatic pattern in a specific situation.

As shown in Hartmann 1986 and 1991, the objective is not to compare ME and its results in different countries or educational systems with the same or different languages of instruction, but to specify areas in which comparison makes sense, to agree on research questions and to be sure that the words being used to translate hypotheses agree not only in their denotations but also in their connotations.

I shall give some examples for the application of different empirical approaches to research in order to determine which one might be most suitable for CME.

2 Strengths and Weaknesses of Applying Empirical Methods in CME

In the second edition of the Handbook of Research in Teaching, edited by Gage, comparison as a method was mentioned just twice; in reference 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 sections 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 mean time. As far as I can see there are to date two main streams of comparative approaches to the research on ME.

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

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

I enjoyed working in both contexts and looking over the fence of the ME-garden but I felt desperate at the same time. Let me try to explain these feelings.

2.1 Experiences from IEA Studies

IEA strives 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 requires 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 in different formats. In addition, background questionnaires are developed to be filled in by pupils, teachers, school principles and sometimes even by 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 the 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 Six-Subject-Study two fields related to ME i.e. "Reading comprehension" testing reading comprehension, word knowledge and reading speed in 15 countries or educational systems and "Literature", where in addition to comprehension and interpretation, the preferred response to literature was the focus of interest in ten countries. 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 countries and piloted. The testing took place in 1985 to 1986.

The third ME-related study of the IEA was launched in 1987; the Reading Literacy Study, with the participation of 32 educational systems. The testing took place in 1991 in two populations, the research questions being the reading ability at the primary and the secondary level and a comparison to a previous IEA Survey of 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 is that internationally and nationally the studies are prepared with uttermost precision, that the results are highly reliable and allow valid conclusions from the samples obtained from the populations tested. Critics might ask what the benefit or the advantage of these international studies might be in comparison to national ones. I observed 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 mother-tongue education and its sub-disciplines were not at all congruent in the different countries. Content fields were included in the subject in one country, were completely missing in another one or dealt with in other subjects; methods and stimuli differed between some countries and were totally unknown in others. Agreement on the meaning of specific terms was often easier to achieve between participants from different language groups than between those claiming to use the same language, like the researchers from Great Britain, the US, Australia and New Zealand or from France, Ivory Coast and Quebec.

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' ME.

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 analyzing the German data, that only very few of our pupils gave the advice to write what the teacher likes to read, and even fewer 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 on 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 country with the second highest number of advice in these categories reached not more than 1/7 and 1/5 respectively.

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 influences ranging from the research question to the presentation of results. As a result, it provides 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:

1. The comparatively high costs of the study, especially when it proves necessary to translate long reading texts as reading material, composition stimuli ratings or scoring manuals.
2. The dependency on official permission to do such research, with all the problems of prerequisites to fulfill and guaranties asked for.
3. The limited flexibility in changing the research design if during the study it becomes clear that certain fields are not promising enough or others should deserve more attention.
4. 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.
5. The temptation to be content with the statistical results and not to care about the individual case. The tendency to leave a huge amount of material rich in content untouched, looking for the chance to apply the knowledge gathered in another field.
6. The pangs of conscience of not being able to do everything with the material it deserves.
7. The comparatively long time it takes for results to reach the individual teacher in the classroom.

2.2 Experiences from IMEN Studies

For the International Mother-Tongue Education Network, IMEN, research on ME is not just one among other fields its members are interested in, but the central issue. IMEN aims not primarily at the achievements but at the roots of ME. It tries to overcome the self-content behaviour that accepts the everyday way of teaching as a matter of course, and to sharpen the awareness of the nationally determined definitions of ME and of the culture specific creation of national curricula, and to contribute to opportunities to broaden or renew current definitions of ME.

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

Since joining IMEN, I have taken part in two projects. A comparison of the situation in Finland and Germany, and in 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:

1. The same benefits as noted when discussing the IEA concept, i.e., the awareness of differences etc.
2. The time and possibility to discuss in detail and depth features noticed in the actual classroom with teachers, students and fellow researchers.
3. Research can be done on a comparatively low budget.
4. It turned out to be comparatively 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.
5. The direct chance to analyze and interpret the collected material without being forced to wait for a statistical analysis to be completed.
6. The possibility of immediate influence on teaching behaviours and strategies in the respective setting.
7. 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 considered, which for some people - and here I include myself - are threatening.

1. It is by no means granted that the observations are representative in a given country. For this, one has to rely on the subjective judgment of fellow researchers. Their impression is the only safeguard against the intentional or accidental presentation of an untypical class.
2. The tendency to be content with the observation when it fits into the pictured situation.
3. The danger to over-generalize the findings.

3 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 the usefulness for the comparative study of ME one should try to visualize their main features.

For many years the differences and weak and strong points of the approaches and ways to overcome 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.

3.1 The Qualitative Approach

This approach is very appealing to most mother-tongue teachers and researchers in the field of ME. As its source is anthropology it is occupied with qualitative, ethnographic interpretations, thus meeting the ME experts interest in the individual and his or her specific behaviour: research that focuses e.g. on teachers' and students' thought processes and meaning-perspectives belongs to this category as well as the description of "pedagogical content knowledge", according to Shulman (1987), i.e. content specific ways in which teachers understand, formulate, present, explain, and discuss the content being taught.

But even alternate (non-positivist) epistemologies need some means of validation or means of persuasion. (Berliner 1989; Salomon 1991).

A subcategory of the qualitative approach, in favour among MT specialists, is among others, the Antinaturalistic Approach described by Tom (1984), where methods of the natural sciences inappropriate for the social sciences are considered. Another is the interpretavistic approach, focusing on the phenomenological perspective of the persons behaviour. Since communication is understood as behaviour, this approach is often considered

to be of special value in ME. Behavioral uniformity is seen "not as evidence of underlying, essential uniformity among entities, but as an illusion - a social construction", as Erickson phrased it. (1986, p. 126, cited in Gage 1989, p. 5). The cultural compatibility hypothesis - backed by Goldenberg and Gallimore (1989), the constructivistic approach, the approach of the symbolic interactionists, the hermeneutic approach and many more belong to this group.

I am mentioning this set of approaches first, because ethnology is, by virtue of its roots, a comparative discipline that compares human cultures, and it is natural to apply its methods to 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 and in our case especially in the field of ME (Hartmann 1994). Here complex concepts of meaning, human relations, and understanding of the surrounding world are turned into words and words into literature and other means of communication. To enable and secure successful communication between different generations is often cited as one of the general goals of ME and of literature education.

The sociological ethnographic studies referring to small scale micro-studies of the school or the classroom can trace their roots to strong and convincing predecessors. 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", (Rist 1980).

3.2 The Quantitative Approach

An important source of the quantitative approach is psychology. It has a long tradition in social sciences, and it is actually due to this approach that 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 measured in exact terms, or at least seem measurable in such a way. Critics claim, quantitative researchers in ME just pretend to be exact. On which type of scale is, for example, the scale on which students' compositions are graded based? As long as researchers are not able to agree here on basic definitions and decide whether the notes are nominal, ordinal, interval or relational they should not dare to apply quantitative methods to ME.

Nevertheless, I consider this approach to be a step in the right direction: as long as the research design is planned in such a way as to exclude subjective

inferences and to be as precise as possible, as long as 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, we can expect more reliable information on the overall state of the subject ME and its general features than from any of the qualitative approaches, when we are analyzing the results and checking whether the initial hypotheses are supported or should be dumped. Whether new relationships emerging from the results should again be treated by this approach or prior to that be analyzed by a qualitative method depends on the specific situation.

As in the qualitative domain in the quantitative a number of sub-groups can be described. E.g., the approach of the critical theory first applied by analysts from economics, political science, and sociology is useful when we are dealing with the relationship of schools and ME to society, with the political and economic foundations of our constructions of knowledge, curriculum and teaching and the mutual dependency of language based value systems as treated in ME and the ethics of social behaviour in a society. This dependency only becomes obvious when confronted with the respective relations in other societies.

Many other approaches belonging into the quantitative domain, positivist - using scientific methods - and interpretivist - exploring social constructions of reality - still have to fight against the prejudice of being more or less trivial, no matter whether they are capitalizing on precision, like the analytic approach, or on authenticity, like the systemic approach. What is needed is a reconsideration of the whole structure of society in which education, including teaching, occurs.

4 Common Features to All or Most Approaches

Almost all approaches, in spite of the obvious differences, share at least three common features when applied in education and over all when applied in CME:

4.1 All Need Some Validation

What holds true for Comparative Education in general, the difficulty to agree on the terminology before a successful project can be undertaken, turns out to be an even more crucial point in CME. When comparing systems it is only

after the definition of the terms for the units of analysis, the variables and the background features have been agreed upon, that 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).

The common object of analysis, as the otherwise shared basic feature, is just the element the absence of which is the first to be noted in CME. The need for its 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 analyze the feature with an adequate tool, giving us insight into differences between school subjects and not only between languages.

4.2 All Face the Need for Some Standards of Quality

The congruence of research questions and data collection and analysis techniques.

No matter whether you are a dedicated follower of one or the other approach - and here I follow mainly Howe and Eisenhart (1990) - 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 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 may be considered the only adequate one. A typical pattern from ME: 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 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 with people from other cultural traditions gives you a chance to become aware of your dependence from on 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".

Overall warrant.

Especially in ME the boundaries of the subject are all but clear. There are connections to many neighbouring subjects, influenced by and influencing ME, as well as topics included from almost all fields you can think of. The same holds true for CME. All these fields have their own and special ways of handling research problems and even when they are not familiar with those applied in CME it is more likely that results will be accepted by them if 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 about whether all our research is really worth the effort. We should be able to answer the "so what" question with explicit information on the value of our findings for educational and ME practice. "The students in country X read fewer 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".

In addition we have to follow research ethics. In our case that means we have to consider 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 reading task that is by far too complicated for 99% of the pupils offends the internal value constraints as it might hurt the self-esteem of the students, even more so if the test-administrator hints that the task is easy for pupils, even younger ones, in another country. 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.

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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 single case or under which conditions one can assume a wider generalizability, be it inside one educational system or across the borders.

5 A Decision Model

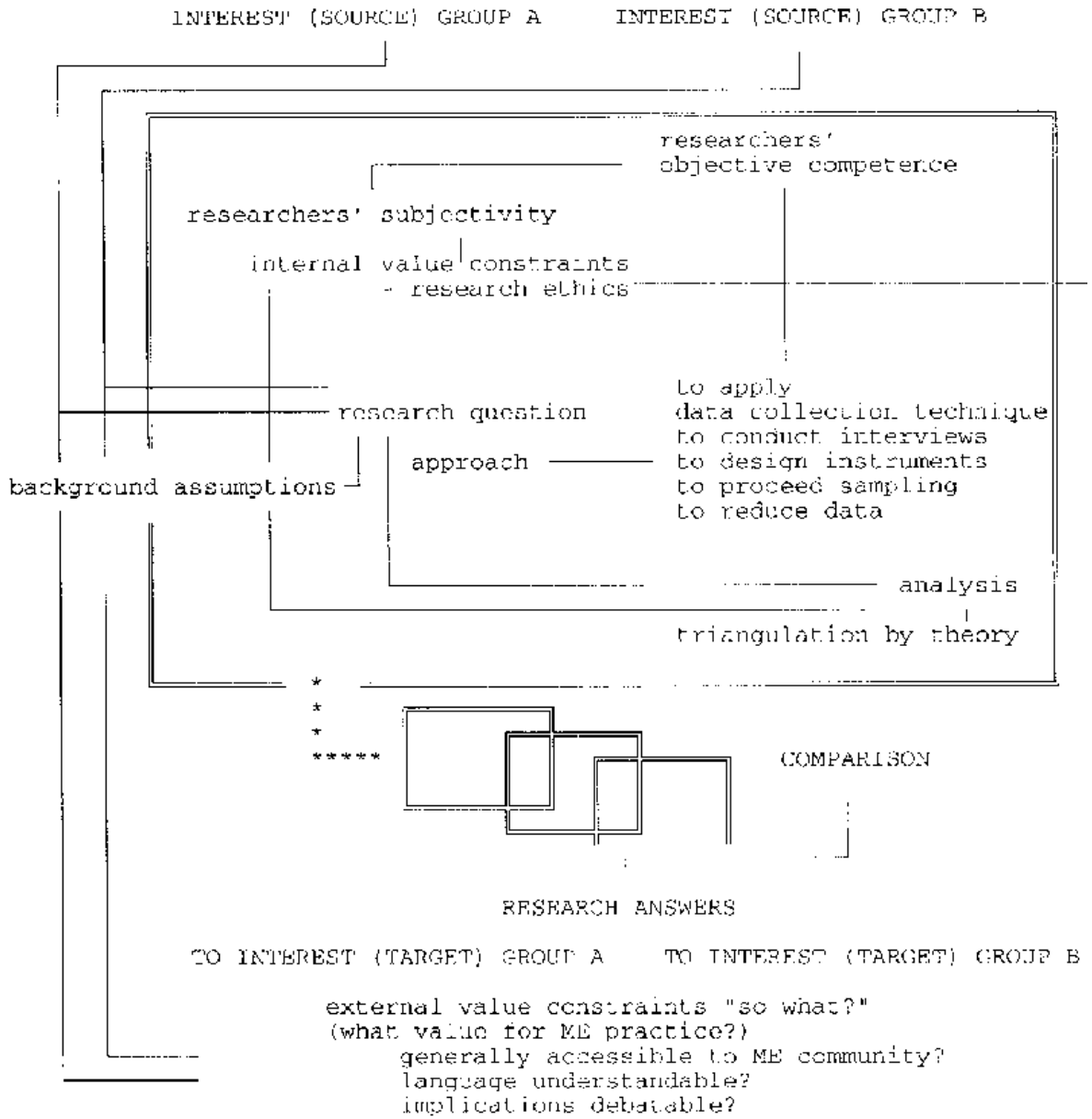
Taking into account the number of fields where the different approaches overlap, it should become apparent that there is no necessary antagonism between the quantitativists and objectivists, the qualitativists and interpretativists, and the critical theorists (Gage 1989, p. 7).

The different approaches fulfill specific tasks in their striving for a sounder understanding of the situation in ME. The choice between 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 model as shown in Figure 1. Assuming that two groups A and B are under the impression that a certain research question in ME is of interest and could gain something from a comparison, they should set up a joint project, symbolized in the model by the double line ==.

The research question, although it may look the same on the surface even after thorough translation for all participants it has most likely been reached by way of deeply different structures, influenced not only by the different group interests but also by divergent background assumptions one did not discuss in detail, because one did not expect them to be different. In addition, the participating researchers' subjectivity, depending among other things on the interest and the background assumptions of his or her group, influences the internal value constraints and research ethics and therewith the interpretation and scope of the research question with which the chosen approach is determined. This approach requires the mastering of certain skills. Only if these requirements and the researchers' objective competence match, can the first steps of the research project be successful and lead to an analysis,

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Figure 1: Terms to Agree Upon.



which again is influenced by value constraints and the research question as well. The results of the analysis must be checked by a triangulation theory.

This procedure takes place parallel or, subsequently in different settings, with a permanent exchange between and discussion by the participating researchers - this phase in the model is indicated by the double framed boxes. When all results from the different studies have been secured, the comparison takes place and hopefully leads to research answers of interest to the participating groups A and B. These answers have to be strong enough to survive the test questions given at the bottom of the model and thus form the basis for the next series of research.

Assuming that there really is a difference between methods and didactics (in the sense of the French 'didactique', the German 'Didaktik', perhaps best translated into English by 'Philosophy of Methods') I got the impression that for research on methods, the qualitative approaches are the most useful and for information concerning the didactics, the quantitative.

But it is not as easy to decide to use a certain approach. A number of different prerequisites has to be met to expect a positive outcome of a research project. For projects in CME I suggest to work one's way through a simplified decision diagram (see Fig. 2) when the question arises out of an individual research interest whether an empirical comparative research might be recommendable.

Usually it turns out to be comparatively easy to formulate the research interest of researchers from different countries in such a way that they sound alike. But this alone cannot serve as a sound basis for CME research. Four initial questions have to be answered with a clear YES to make probable a sound foundation for the planned project: the question of existing or achievable research experience, of internal value constraints, common or disputable background assumptions, and mutually acceptable research questions. If the answer to one of these questions is NO, the CME project should come to an immediate end.

After the latter have been formulated with the necessary precision it sometimes turns out that the answers obtainable from literature are sufficient or that the prospects for gaining new insight from empirical research are not high enough. This too would bring the joint CME project to an early end - but at least an end with new insight.

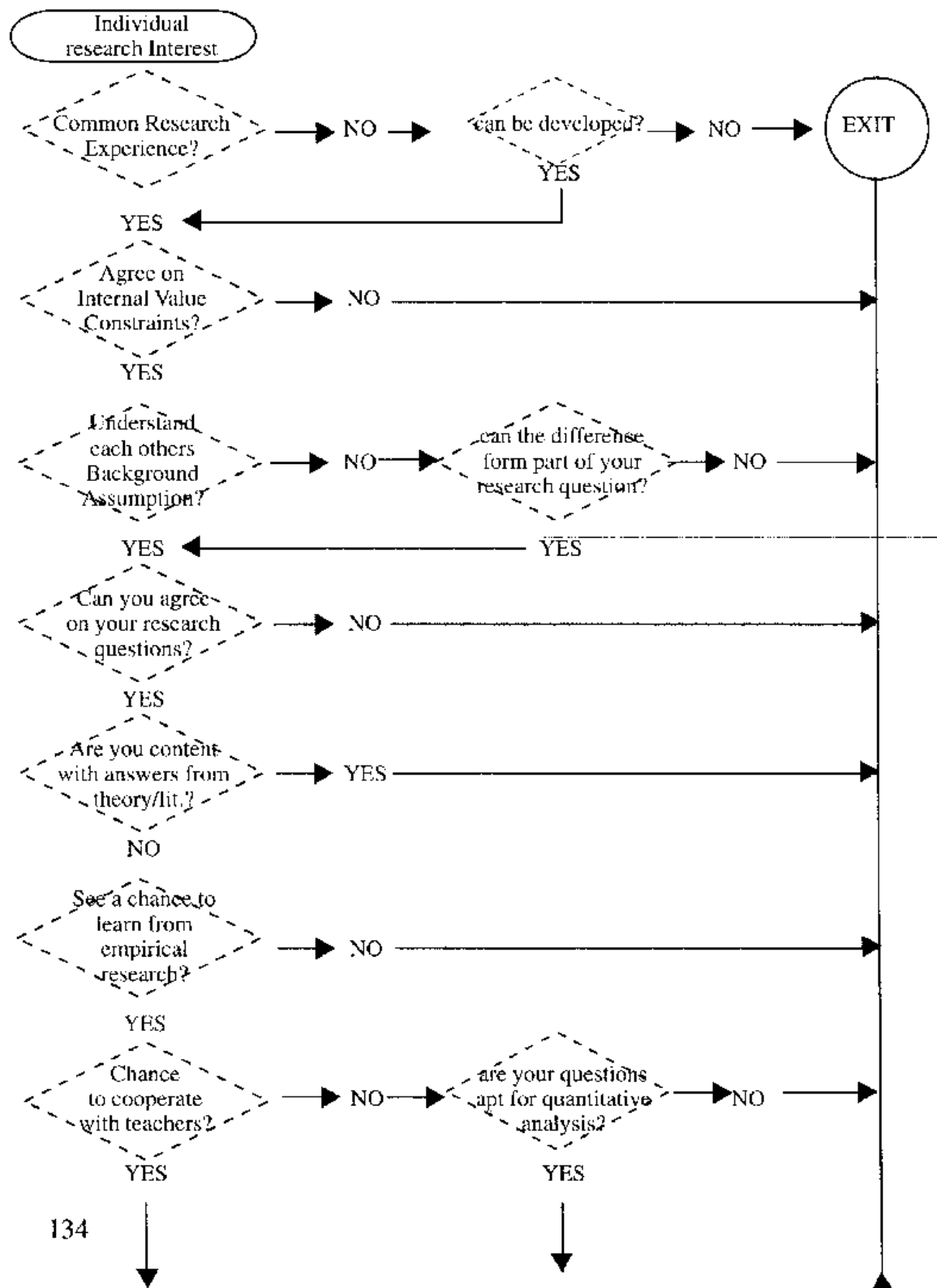
It is only at this stage that attention should be paid to the question whether the next step should employ quantitative or qualitative methods. The following diagram gives as examples for necessary prerequisites decisions fields, asking about the possibility to cooperate with teachers and about the appropriateness of research questions.

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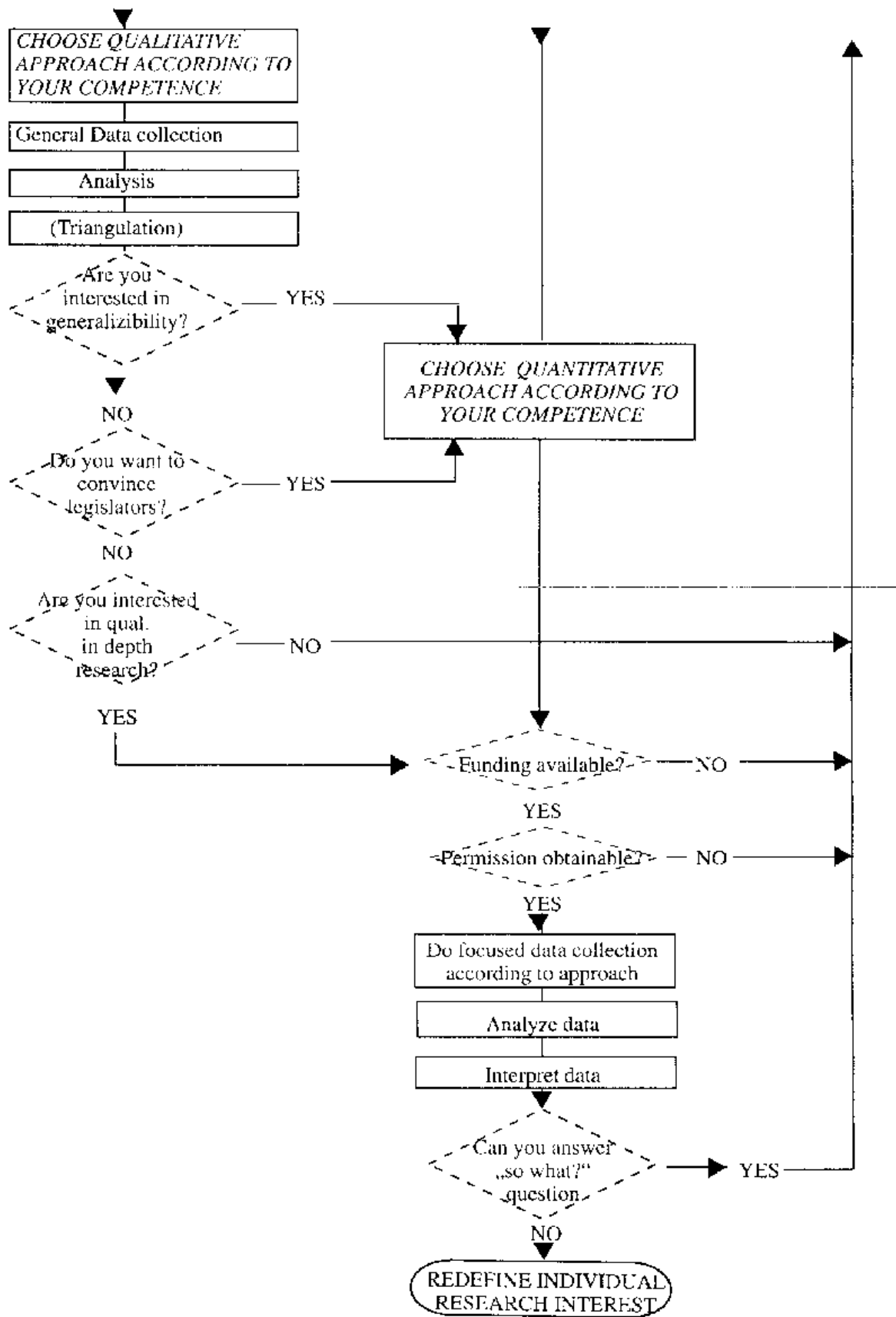
After you have successfully finished your qualitative CME project I strongly recommend you either ask yourself two questions concerning generalizability and political aims in order to decide whether to add a quantitative project or to be honest with yourself in determining whether you want to offer the results to the ME community, in which case you should undertake further in depth qualitative research. Positive answers to one of these three questions leads to the barriers of obtaining funding and necessary permission before you finally can approach the first phase in quantitative or the second phase in qualitative research.

After data analysis and interpretation comes the moment of truth: only if you are able to show what consequences your results have for ME, for educational policy or the social well-being in each of the participating countries may you relax and consider your project successfully finished. Otherwise you find yourself thrown back to the starting blocks, albeit with more experience to show for it.

Figure 2: Decision Diagram.



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