

# Theory and methodology of international comparisons

Uwe Lauterbach, Wolfgang Mitter

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# THEORY AND METHODOLOGY OF INTERNATIONAL COMPARISONS

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## 1. SUMMARY

Comparative studies in *Comparative Education* are becoming increasingly important within the framework of the debate on globalisation and increasingly close political alliances. In the field of Community educational and vocational training policy, the European Union has, e.g. by means of the Leonardo Da Vinci programme, provided major stimulus for *Comparative Research in VET*. Besides the „professionals“ involved so far, many other people (research scientists, politicians, social partners etc.) will also have to enter the field of comparison or are being forced to interpret the results obtained in a critical manner. Caution must be used when applying the results which are drawn not only from quantitative and/or qualitative scientific studies but also from statistical ones. We have demonstrated in various examples how misinterpretations are possible and the norm.

Furthermore, it could be proven that the methodological concepts are often not substantiated in studies on *Comparative Research in VET* and in many cases are purely coincidental. For a number of research scientists the methodological issues were of marginal importance. That is why the results are not free of controversy already because of the missing methodological basis. Critical assessment of research results, in which the methodological concept and the main interest of the comparison have not been revealed, should therefore be initially conducted on this level. It may be the case that a review of the methodological substructure will also lead to a review of the study results.

In the case of our stocktaking, which repeatedly establishes the link to the underlying discipline of *Comparative Education*, the decisive importance of the methodological approach for the research results of *Comparative Research in VET* and also in the neighbouring disciplines could be proven.

## 2. WHY COMPARATIVE RESEARCH IN VET?

The national economies of the industrialised countries are experiencing a fundamental structural change from production-oriented to service-oriented societies. System thinking as well as the ability and willingness to engage in lifelong learning are emerging as indispensable vocational qualifications. The degree to which VET systems are prepared for this challenge varies greatly in the industrialised countries. Nobody would dispute the immense importance of VET for the economic and social development of national societies and supra-national organisations, such as the EU. This relationship is underlined in Articles 126 and 127 of the Treaty of the European Community. It has become almost a truism, and not only the conviction of experts in the field to state that purely national solutions to economic problems are hardly feasible any longer.

The Study Group on Education and Training set up by the European Commission argues in a similar manner. Its report (1997) takes up the guiding principles of the White Paper on *Teaching and Learning: towards the learning society* (1996), examines them in greater depth and makes recommendations which stress the major importance of the development of general education and VET for the accomplishment of European identity, the switch to a cognitive society and for economic performance in a global society. This report repeatedly mentions the importance of *Comparative Research in VET* for the further development of education and vocational training systems. „Devise common methods for the evaluation of education and training based on experiences on national levels, in order to benefit from a comparative dimension.“ (p. 31)

„Evaluation must aim to make comparisons over space and time of education and training outcomes. Therefore, a precise definition of what is to be evaluated, and the criteria by which this is to be evaluated, are essential. In particular, evaluation should focus on learning outcomes: what have pupils learned? However, evaluation must also take account of the effects of the environmental context; evaluation should neither inhibit nor punish.“ (p. 134)

Due to the strong international interdependence, research evidence that could serve as a stimulus or a basis for system reforms, currently discussed or already started in many countries, can best be found in *Comparative Research in VET*.

Also in the first *European Report on Research and Development in VET* there is a series of studies on a comparative basis. At the conference about the situation of preparatory work for this report, the *Conference with the Contributors to the Report* in Thessaloniki in July 1997, the need became very clear for critical analysis of the methodology and theory of *Comparative Research in VET*.

Analysis has already been undertaken on several occasions about which methodological problems occur in the international comparison of education and vocational training systems (system approach) and/or their functions (problem approach) on the macro, meso and micro levels on the basis of quantitative, qualitative or mixed data (Lauterbach, Mitter 1994; Lauterbach 1995, 1997).

In this connection reference is made to only a few OECD studies. Again and again the phenomenon can be observed that statistical data from various countries, the accuracy of which is never challenged, are compared without the subjects of this metric comparison being analysed in greater detail. School leavers (upper secondary graduation) with a final certificate from general secondary level II (general education) are estimated by OECD to account in Germany for 22.6% of the population of that age, those from the vocational channel for 65.9% of the population of that age. The two figures are then added together. The proportion of graduates with a final certificate then accounts for 88.5% of the corresponding population. These results do not take into account the fact that 15% of the pupils in initial vocational education or trainees are school leavers (upper secondary graduation) with a final certificate from general secondary level II (general education). If we add this 15% to the above 22.6% then the result is slightly higher than the official German statistics. It is not a matter of proving that the OECD statistics have been calculated wrongly. That is certainly not the case. The reason for the incorrect portrayal lies in the additive definition of general and VET education in secondary level II and inadequate knowledge of the system. With that knowledge it would have been obvious that, beside the additive definition, there was also an overlapping integrated definition which meant that the graduates from general education apart from moving on to higher education also moved to VET and that this was on a large scale in some countries.

For other countries, too, statistical data are classified in a more formal manner, i.e. according to the name of the institution. The very low proportion of graduates from general secondary schools (secondary level II) can only be explained for Italy if the institutions such as in *istituto magistrale*, *istituto tecniche* etc. are classified as vocational schools although, to an increasing degree, the graduates can only do something with the university qualifying certificate issued there (*maturità*) and the vocational certificate issued within this dual qualification is not well received on the labour market. It would be more appropriate to classify statistical data according to the actual function of the educational institution rather than according to the designations which, as we have shown here, can easily be misleading (OECD 1997, pp. 133 - 138).

This example stresses the importance of methodology also when comparing metric data. If a more precise definition of the areas of comparison, general and VET in secondary level II had been given and there had been more extensive knowledge of the systems, this comparative „venerable“ principle of comparative education which states that a study design for comparative studies can really only be developed by scientists who have extensive knowledge of the system (Barber 1972, 1974).

In international competitions (Skill Olympics) the Republic of Korea and Japan always chalk up excellent results. Since 1977 Korea has won the competition nine times in a row. Japan, too, has a very good track record. We should not forget to mention the excellent performance of the participants from Liechtenstein either. When evaluating this information it is easy to

establish a connection with the performance of the VET-System particularly when arguments are based on the prosperity of the national economies in Japan and Korea.

„The skill Olympics are mainly oriented towards mono skills and not towards proving complex vocational ability. The Koreans have shown all other countries that they are prepared and capable of the highest performance in special skill training (...)

For Koreans successful participation in the Skill Olympics serves several purposes. Firstly, this has to do with attracting attention within society to technical-vocational training as an important national task. Secondly, it is a matter of winning international recognition as an industrial nation which is to be taken seriously“ (Georg et al. 1995, 1997, p. ROK-99).

What conclusions are to be drawn for Comparative Education and *Comparative Research in VET* ? When selecting and interpreting descriptive/qualitative data, which have been collected by means of exact empirical methods in the social sciences, standards, evaluations and structures are contained which are integrated into the cultural context of the countries/cultures selected for the comparison. Karl Popper (1971, p. 75 f.) remarked very accurately in this respect:

„The empirical basis of objective science is not absolute, science is not built on a rock. It is rather a marsh over which the cool construct of its theories rises [...]“

The idea that the facts can speak for themselves, does not take into account how these facts were created and what is done with them. Nor is it a new approach to say that Comparative Education works with hypotheses. The primary values should only have priority when determining and substantiating hypotheses. This is the only way in which the components which are the determining factors for an education and VET system can be identified. In the case of so-called value-free hypotheses as the basis for descriptions, analyses, juxtapositions and comparisons, erroneous interpretations are inherent in the method since every research scientist is limited in his perception and is biased because of his own conceptual-ideological ideas (paradigms) concerning how the world is structured (Barber 1974, p. 244).

The first task of *Comparative Research in VET* can only be to counter these „misunderstandings“ by means of a critical approach to the text and by means of a fundamental methodological structure which does not deny cultural background and values.

These examples reveal that *Comparative Research in VET* is still in the teething stages of its development. Unlike Comparative Education, *Comparative Research in VET* cannot build on almost 200 years of development as an (also internationally) well-established scientific discipline. So far, the various comparative concepts have not even been reviewed. To sum up, it can only be deplored that *Comparative Research in VET* has not made the expected progress judging by the constant increase in international interdependence and mobility. This applies not only to goods and services but also to vocational qualifications.

These theoretical deficits of *Comparative Research in VET*, which focus on questions concerning the VET of young persons and adults, can no longer be justified given the steadily growing political, economic and cultural interdependence on the supra-national level, e.g. in the European Economic Area within the EU. In this context we can take up the analyses and recommendations of the Study Group on Education and Training which in an *Annex on the comparison of education and training systems* suggests the setting up of a study programme within the EU in order to undertake comparative analyses of systems (p. 153).

This paragraph explains why comparison is an important precondition for obtaining knowledge about which sciences and contents are of importance for *Comparative Research in VET* (1997). The discussion of methods, which is currently being conducted in *Comparative Research in VET* is nothing new for *Comparative Education* and for *Comparative Research*. For these disciplines there are reliable findings on the methodology of comparison which form an excellent basis for comparative research in the field of VET.

That is why they are extensively referred to. Finally, an overview is given of the methodology and current situation in *Comparative Research in VET* in Europe. The conclusion of this stocktaking ends with a proposal for the methodological approach in studies in the field of *Comparative Research in VET*. In the synoptic overview, statements are made about the development of research in VET within the context of the European development.

### 3. CLASSIFICATORY ISSUES

#### 3.1 Comparison as a Basic Methodological Principle in Science

Comparisons are not distinctive features of Comparative Education, International Education, International Education in VET, or of *Comparative Research in VET*. As we know from anthropology „*It is only in comparison with others that it is possible to understand itself*“ (Tedesco 1994, p. 1) and, therefore, comparisons with other societies are an essential prerequisite to understanding one’s own society, one’s own position and ultimately oneself.

Similar to Comparative Education, International Education focuses on the supra-national problems of education systems and those problems that are specific to any one education system. It uses the theories and methodologies of history, philosophy and social science. *Comparative Research in VET* has to incorporate several problem areas that are not traditional subjects of Comparative Education, such as the labour market and other contextual conditions, e.g. cultural context social legislation and economic structure. There is a whole host of phenomena.

The comparative method is common in most social sciences and is of great importance to research (Berstecher 1994). Equivalents in other academic disciplines are, for instance, Comparative Economics, Comparative Political Science, Comparative Psychology, Comparative Sociology.

#### 3.2 Comparative Education, International Education, Comparative Research in Education

While *Comparative Education* as an academic discipline proceeds in an interdisciplinary manner, drawing on the qualitative and quantitative methods of related disciplines for its own issues, *International Education* focuses on international, practical projects, e.g. the support of projects in developing countries and international co-operation in VET, and accompanies the work of actors, such as students, researchers and experts.

Comparative Education is an academic discipline. The main interest of researchers in this field consists in finding out why education systems and education processes in the broadest sense vary in their international development, how (under which conditions) they function and they develop.

Any comparison of systems and specific functions of systems is an intercultural comparison. It is not statistical correlations that help to gain an insight into systems and their functions but the far-reaching preliminary understanding of the various historic, cultural and socio-economic interrelations in the various cultures. „Understanding/comprehending“ thus includes not only statistical correlations – which cannot be established without a „hermeneutic contextualization“ – but often has to take into account highly complicated interrelations that are difficult to grasp. Although the first representatives of Comparative Education, including Julien de Paris and Sadler, could not draw on quantitative methods in the modern sense of the term, they arrived at similar results concerning the tasks of Comparative Education.

Saul B. Robinsohn supports this approach and believes that intercultural comparison contributes to the transparency of the national education system and helps to challenge the principles and structures of the national system. The comparison also yields valid information and knowledge on foreign education systems, thus contributing to understanding of those systems and to international understanding in general (Robinsohn 1969).

*International Education (IE)* takes up its findings of Comparative Education, of which it is a part (Epstein 1994). In addition to research supporting individual projects, International Education focuses on the internationalization of the educational process and on International Organizations. It accompanies the processes of actors, such as students, researchers and experts and those of facilitating organizations, such as the World Bank, OECD, UNESCO.

*Comparative Research in Education* as the interdisciplinary form of Comparative Education conducts studies primarily on the education system in the context of social, economic and political development. Sociological, psychological, economics and legal issues, therefore, play an important role. Researchers draw on the findings of these disciplines to give comprehensive answers to the questions of Comparative Research in Education.

### **3.3 Comparative Education in VET, International Education in VET, Research in VET, Comparative Research in VET**

In a seminal paper on the *Use of a Comparative Economic and Vocational Education* Czycholl discussed the name of our research subject. Despite the impetus of Czycholl (1970, 1975) and the attempts of Abel (1962, 1966), *Comparative Education in VET* is a new academic discipline. One should not forget the contribution of Aloys Fischer, who, as early as 1926, held lectures on foreign education systems (Kreitmaier 1950). But only European integration and international co-operation in VET led to the emergence of new topics and to a training need, which challenges a comparative discussion of other national VET systems and the influence of political and economic associations, such as EU or NAFTA, on VET. This academic discipline is in the development stage, and so far there are only a few postgraduate programmes of studies in this field.

*International Education in VET* as a practice-oriented discipline is gaining importance especially in the framework of international co-operation in VET and within the European Union. It uses the findings of Comparative Education in VET, of which it is a part. Main areas of work are, in addition to the monitoring of projects, the internationalization of educational processes and the International Organizations.

*Research in VET* deals with those phenomena of education and VET that are directly or indirectly related to employment, to working life or to the acquisition of (vocational) qualifications. It examines the conditions, processes, and consequences of the acquisition of these specialist and extra-functional qualifications, including the context of the cultural, social, technical, political, historical, and economic conditions, e.g. the personal and social attitudes and manners that appear to play a role in the training for and the participation in organized (vocational) processes of work. The VET system has to be put into the context of the education system as a whole (Schmidt 1995; Buttler 1995; Teichler 1995; Kell 1996).<sup>2</sup>

*Comparative Research in VET* as a special type of Research in VET looks at the international development of the objects of Research in VET from a comparative point of view and makes its findings accessible to and usable for policy advisers in the national context and international organizations and associations. Approaches, however, focus on interdisciplinary (Fischer 1967, p. 58 f.) subjects, dealing with VET in the context of social development, especially the economy and the labour market.

Comparative studies are common practice in the framework of European policy in the area of VET, e.g. in the programme LEONARDO or in studies commissioned by the European Commission or by CEDEFOP and the ETF. A number of researchers, who often concentrate on co-operation in VET, work internationally, as do organizations, such as OECD, UNESCO, with its suborganization UNEVOC, ILO and the World Bank.

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<sup>2</sup> Vocational training research also deals with areas such as "changing vocational learning" (3rd forum on research in VET 23-24.09.1997 in Nuremberg Programme printed in: Zeitschrift für Berufs- und Wirtschaftspädagogik, 92(1996)6, pp. 649 - 650.

### 3.4 Main points of *Comparative Research in VET* in the EU

In the first chapter the importance of *Comparative Research in VET* was identified for the further development of VET in Europe and the fundamental importance of comparison in order to obtain findings within research. An explanation was also given as to why many scientific disciplines are involved. This was followed by a classification of the scientific disciplines concerned.

We have now described the general framework for our subject *Comparative Research in VET*. Besides we have to state that several countries do not distinguish between *Comparative Research in Education* and *Comparative Research in VET*. It is more likely that a researcher comes up with questions concerning the education system, with a focus on VET.

The complex nature of the area to be examined has to do in our opinion with the two systems of formal vocational education: Vocational Education and Training (VET) and Continuing Vocational Education (CVT). What was not included in some parts of Europe, particularly southern Europe, is the important area of informal VET e.g. en passant apprenticeship in a non-formalised form. Things become even more confused in respect of the area under examination when formalised and informal vocational education is brought into major correlations which are important for its function in respect of its economic and social dimension and for system or functional analysis. The scale of complexity facing international *Comparative Research in VET* is already obvious for the socio-economic area in respect of the matrix of Manfred Tesslering (1997) which could certainly be simplified and a proposal by Pekka Kämäräinen about the main focuses of current research in VET in the EU:

- Social and economics research;
- System research (also individual functions) and policy research;
- Social and educational research.

The specific research interest should focus on topics, such as the legal regulations and the freedom of setting up business, the mutual recognition of diplomas, examination certificates and other credentials, the transparency of qualifications, the special significance of VET within the complementary social and labour-market policy (EU social funds). In addition, any questions on the relationship of the structure and the curricula of general vs. VET are of universal interest, especially with regard to the question of the international trend towards an increase in the mobility and flexibility of vocational requirements. *Comparative Research in VET* has to incorporate several problem areas that are not traditional subjects of Comparative Education, such as the labour market and other contextual conditions, e.g. social legislation and economic structure. There is a whole host of phenomena. Apart from that, system-related studies that identify general aspects of development and sharpen the awareness of fundamental questions are of great value as the basis for problem approach studies and for policy advice.

### 3.5 Pluridisciplinarity

The methodology of comparison is relevant in all scientific processes where *comparing* is applied as the approach to the acquisition and enrichment of knowledge and the advancement of knowledge standards. Comparative methods are inherent in *all* scientific disciplines and areas. This has to be traced back to people's capability to correlate persons, facts and events. Elementary statements already include reproductions of relations, i.e. comparisons about „comparable“ subjects, even in cases where the speaker is not conscious of it. The comparative methods which are used nowadays in research processes can look back to a millennia-old „pre-history“, as mirrored in artefacts of „popular culture“ as well as in the oeuvres of literature, science and philosophy.

The step from pre-scientific to scientific comparison, i.e. to its systematised conceptualisation and application, coincided with the development of modern science *per se*. Comparative

education boarded the train at an early stage, namely with Marc-Antoine Jullien De Paris and his brochure „Esquisse d'un ouvrage sur l'éducation comparée“ (1817/1992). Since the end of the 19th century it has occupied a solid, though never uncontested place in the science system. The reasons why this place has been controversially discussed until today, are multifarious, covering the wide range between the very definition of the discipline and its policy-oriented task. Its dependence upon and/or its relations to „supra-ordinate“ scientific disciplines are especially noteworthy.

The cross-national debate is closely connected with the question concerning the allocation of Comparative Education to the *humanities* (Geisteswissenschaften) or the *social sciences*. The worldwide range is dominated by the latter option which was founded in Great Britain and the United States from where it has gradually expanded all over the world. On the other hand the inheritance of the „humanistic“ (geisteswissenschaftlich) tradition, referring back to Wilhelm Dilthey, was repressed for a time without having disappeared yet from the agenda. The continuation of the fundamental debate, though from differing positions and with changing argumentations, has been continually signalled by „wars of paradigm“ (Heynemann 1993). It seems that in recent years this debate has calmed down with the development of Comparative Education into a pluridisciplinary research area called *Comparative Education Research*. The recent trends indicating in Europe the formation and development of *Comparative Research in VET*, can be considered as an „offshoot“ of that supraordinate development.

Pluridisciplinarity, above all, means that Comparative Education as part of the educational sciences, is dependent on close co-operation with adjoining social and behavioural sciences on the one hand: sociology, economics, political science, psychology and anthropology (in particular with regard to cross-cultural comparisons). Further orientation leads to the humanities (see above) and also the laws, since comparisons of legal systems and structures have recently gained increasing importance, in line with the demand for „harmonisation“ in international organisations and, even more so, in supranational institutions, such as the EU.

As a corollary of recent orientations of theory and practice in Comparative Education to „evolutionist“ targets and the „World Systems Theory“ its previous commitment to the *history of education* has been revived. Formerly this commitment had been caused by its „humanistic“ roots (Hans 1955, Schneider 1961), while the current trend is stimulated by questions of how and to what extent empirical findings and social theories can be made fruitful for comparative educational studies (Schriewer 1984)<sup>3</sup>. In spite of these basic differences concerning the embeddedness of Comparative Education in pluridisciplinary structures, the „old“ and „new“ commitments to historical issues share the question of the extent to which comparative analyses can contribute to the examination of „universal“ or „pluralistic“ components of educational problems.

*Comparative Research in VET* derives this pluridisciplinary network from Comparative Education with all its connecting lines. Given the interdependence between VET and the employment system, *economics* plays a dominant part as a neighbouring discipline.

Moreover, *Comparative Research in VET* has to take into special account development and progress in the pluridisciplinary area of *technological* and *engineering sciences*, wherever curricular issues of VET (including aims and objectives, contents, methods and evaluation) are investigated.

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<sup>3</sup> In this context it is worthwhile examining Schriewer's efforts to identify the influence of the *Systems Theory* (Niklas Luhmann) on Comparative Education, preceding his recent orientation to the *World Systems Theory* and its transfer to sociology and education.

### 3.6 Subjects of Comparative Research

Until recently studies in Comparative Education were focused on *international comparison*. This primary orientation has not become obsolete at all, owing to the historical fact that the formal education systems („schools“) of modern times as the preferable themes of comparative inquiries, have been products and institutions of *state policies*. Needless to add that the responsibility of the modern State in this respect has not fundamentally changed over the past three or two hundred years, irrespective of its development from its absolutist through its constitutional to its democratic variation. Changes on the political map (by movement of borders as well as by the collapse of „old“ and the emergence of „new“ States) have always had their impact on norms and contents and, moreover, left their traces in the instruction and training methods and in the educational styles. These statements are, in principle, also true of *private schools* and of schools for ethnic and religious minorities. Therefore in comparative studies and inquiries „States“ and „nations“ play an outstanding role as basic parameters.

Responding to social, political and cultural upheavals in the global, regional and national dimension and to their effects on the education systems, comparative educationalists have broadened their epistemological and pragmatic interests to the following areas:

On the one hand their attention has been attracted by non-formal and informal educational processes and, consequently, by subjects of comparison „below the State level“: by families, schools, local communities and intranational regions. In this area *Comparative Research in VET* is offered a wide thematic field, insofar as VET, in contrast to general (liberal) education has always been characterised by more or less „distance from the State“ (albeit in the framework of legislative and administrative rules). This peculiarity of VET can be related to the power and influence exercised by schools, firms and (in particular in the past) families on organisation and curriculum. Therefore the interrelation between „proximity“ to and „distance“ from the State can be identified as a focal comparative theme in empirical and prospective views. For instance comparisons of VET Systems (including structures, curricula, achievement standards and outcomes, social stratification among the trainees, qualifications of the teachers etc.) in two or more big cities (e.g. Birmingham/Milan/Toulouse) and firms (e.g. Volkswagen/Volvo/Renault) are worth being initiated as prospective inquiries. Finally it seems reasonable to apply this range of comparison to the training policy of *multinational firms* under various national *and* cultural framework conditions.

On the other hand the crises of the nation-state and the world-wide migrations of the 20th century have resulted in the emergence of new and/or the manifestation of existing, but latent multicultural societies whose members are marked by ethnic, religious and/or social identities. In this context emphasis has to be placed upon the *comprehensive* range of *culture*, which must not be reduced to ethnic concerns, as is often practised in „multicultural“ studies. This is why the educational problems of cultural units have become more and more relevant. In Comparative Education these trends have led to the constitution of the *intercultural comparison* alongside the international comparison as its „older“ counterpart. It can be referred to subjects of comparison to be discerned inside a State, but also to those which are of cross-national range (e.g. Basques in Spain and France, Turkish migrants in Germany, France and the Netherlands; children of rural background in urban communities of different ethnic and/or religious background). The topicality of intercultural comparisons is, moreover, reinforced by the formation of *cross-national regions* (e.g. Alsace/Baden/Basle), linking them with the analysis of interregional comparisons of the aforementioned intranational type. With regard to history, placement, workforce and production, *Comparative Research in VET* opened up a wide range of questions, posed by the categories of „industrial culture“, „labour culture“ and „firm culture“, in correspondence to the category of „school culture“.

### 3.7 Dimensions of Comparative Research

As regards *dimensions* of comparative analysis, one can make a distinction between two research types which have developed during the 20th century. In its first half Comparative

Education was dominated by the drive for *total analysis*<sup>4</sup>, related to national education systems in their historical frameworks. Since the sixties the growing consciousness of the impossibility to meet such a far-reaching claim by means of empirical analysis or detailed text interpretation has led to the device of the *problem approach* which gained remarkable importance<sup>5</sup>. Its main value for Comparative Education is based upon its providing an open path to investigating „functional systems equivalencies“ at various levels of education (e.g. content and subject-matter in the curriculum of learning and training, qualifications for the employment system, time to be consumed for required achievements). Its basic dimension comprehends the *macro-level* of national or regional education systems, while the *micro-level* of educational practice has become worth exploring to an increasing degree, too. Micro-inquiries deal with closely confined events or processes, whereby the range can vary according to the geographic, temporal and thematic limit. Recently they have become more and more topical with the growing significance of „autonomy“ or „self-government“ of decision-making at the level of low organisational units (in VET e.g. firms and schools).

The diversification of the problem approach has however been balanced by a certain revival of the *total analysis*, caused, in Comparative Education, by the reception of approaches derived from system and evolution theories<sup>6</sup>, though now including empirical findings. *Comparative Research in VET* may be especially stimulated by the recent confrontation of universalistic (as demonstrated by the World Systems Theory) and cultural-pluralistic (as demonstrated by cultural anthropology) views to pose new questions. New themes and projects may originate from the awareness that predictions about reasonable and optimal strategies in VET cannot be concluded only from identifying „functional equivalencies“ in their instrumental limitation, but need to include responses which are necessarily rooted in the interpretation of culture-bound attitudes: to labour, profession, mobility, morality, etc. In such an approach the confrontation between universalism and cultural pluralism as focal impulsive forces for thinking and acting becomes manifest in the tension between people's ability to respond to the challenges of *globalisation* (at various levels: economic, technological, social, political, scientific) and their ties to „their“ specific cultural frames of reference. Such reflection points the way to both „international“ and „intercultural“ concepts.

## 4. METHODOLOGICAL CONSIDERATIONS

### 4.1 Basic Issues

Fritz Seidenfaden established the thesis „that each scientific discipline in which the comparison is to be applied as a productive approach, has to face specific problems resulting from the structure of the particular subjects of inquiry (Seidenfaden 1966, p. 14). This thesis makes reference to the fundamental interrelation between subject and method. Three decades before Friedrich Schneider had expressed plausible doubts concerning the definition of Comparative Education, based upon the application of a *method* instead of a *subject* of knowledge and research (Schneider 1931/1932, p. 247). It should be added that this issue has not left *Berufspädagogik* in Germany unaffected in the sixties and seventies. To give two examples, Jürgen Selzam identified the comparative method as „the principle of identity of the Comparative Wirtschaftspädagogik (research on economic education) (Selzam 1968, p. 64 f.), while Reinhard Czycholl (1975), similar to Seidenfaden, argued „that

<sup>4</sup> This dimension can be exemplified by Nicholas Hans' studies on „educational factors and traditions“ and by Friedrich Schneider's concept of „impulsive forces“ (Triebkräfte), both approaches related to national educational structures (see Hans, *loc.cit.* and Schneider, *loc. cit.*).

<sup>5</sup> Its most prominent representative is Brian Holmes who made his elaborate studies on the basis of hypotheses which were derived from educational theories (cf. Holmes 1965).

<sup>6</sup> In this context it is also worthwhile to refer again to Brian Holmes who, in his late oeuvre, turned his attention to the analysis of comprehensive problems, and that by the identification of „ideal-typical normative models“ derived from his studies on Plato, John Dewey and Soviet education. Thus, before the recent trends he re-discovered the wider dimension of *total analysis*, though, in contrast to the aforementioned 'classical' comparative educationalists, contenting himself with testing the *probabilistic* and *epochal* conditions concerning the topicality of educational problems (cf. Holmes 1981).

methods are remedies bound to the attainment of scientific aims“; however, Czycholl also remarked that „each scientific discipline must, among others, use the comparative method in the pursuit of its aims“ (p. 4).

The exemplary retrospect to the argumentations points the way, on the one hand, to a fundamental classificatory problem of Comparative Education and, consequently, of *Comparative Research in VET* and, on the other hand, to their *continuous* task to develop and refine their methodology by looking for stimulation and suggestions for their neighbouring scientific disciplines. It is the fundamental interrelation between subject and method to which all methodological considerations need to be referred. The second source of this task is identified by the aforementioned *pluridisciplinarity* of Comparative Education and *Comparative Research in VET*.

## 4.2 Categories of Comparison

Every comparative inquiry must be rooted in the researcher's expertise of *base*, *process* and *aims* as the fundamental categories of comparison.

The *base of comparison* is determined by the comparability of the subjects which have been taken into account, as well as by the definition of „the common factor enabling comparison“ (Seidenfaden 1966, p. 62). This factor, constituting the supraordinate frame of reference, is called *tertium comparationis* and derived from the subjects of comparison which, related to the existence of two subjects - are defined as *primum* and *secundum comparationis* (Eichberg 1972, p. 21). The identification of comparability rests upon establishing a categorial and thematic interrelation between the chosen subjects „aimed at equality (congruity), similarity (affinity) and diversity (discrepancy)“ (Hilker 1962, p. 100). Contrary to the popular assumption of „equality“, comparability in scientific comparison is dominated by topics suggesting „similarity“ and also „diversity“. The identification of the *tertium comparationis* lays the ground for the elaboration of *comparative indicators*, according to the questions which are to be investigated.

As regards conceptualising and implementing, the individual methodical steps in the *process of comparison*, the scheme, proposed by Franz Hilker in a representative way, were considered as the „classical“ patterns. It is composed of:

- a) the *description* of the chosen subjects of comparison, based upon the collection of data and other sources;
- b) the *interpretation* of each subject of comparison in the framework of overall educational as well as political, economic and cultural conditions, with special regard to the historical factor;
- c) the *juxtaposition* consisting of the descriptive and interpretative results of the preceding inquiries on the individual subjects, primarily by the application of schemes in tabular form;
- d) the (proper) *comparison* as the comparative interpretation of the inquiry on the whole.

This „classical“ pattern has been gradually refined and replaced by classificatory models which serve the heuristic function of the comparison to a more stringent and precise degree. As a paramount example the methodical model devised by Saul B. Robinsohn (1973) merits special attention, all the more so as it illustrates its direct orientation to the methodology of modern social sciences in principle; he speaks of (pp. 324 f.):

- a) the „idea“ (analysis of a given situation or problem, examination of available sources), becoming materialised in a *hypothesis*;
- b) the identification of *relevant data*;
- c) the establishment of *variables* and the determination of *comparability* (of the chosen subjects);
- d) the repeated *modification* of hypotheses and data collection (according to the demands inherent in the context);

- e) the activation of *previous knowledge*;
- f) the establishment of the *tertium comparationis*.

This refined pattern includes flexibility towards further differentiation as well as re-arrangement. Nevertheless the „classical“ pattern has survived in many comparative studies. In particular, *Comparative Research in VET* is still widely dominated by *juxtapositional* descriptions in tabular form which is suggested, above all, by the outcomes of quantitative analyses.

The third category is indicated by the *aim* each comparative inquiry is related to. *Firstly*, it determines the progress and direction of the heuristic operation, whereby „explaining“ and „understanding“ can be considered as the focal variations (see below).

*Secondly*, the aim is rooted in the fundamental question, to which degree the application of comparative methods points the way to the generation of generalising theories and, moreover, permits predictions or judgements about „universal“ trends of evolution, perhaps even the identification of „laws“ concerning the relations inside the education system as well as between this system and the processes in the society on the whole. In Comparative Education this far-reaching issue has always played an important role.

On the one hand, in this context special reference has to be made to the *trend analyses* having been continually conducted by the big inter- and supranational organisations, such as UNESCO, OECD, the World Bank, ILO, the Council of Europe and the EU. Furthermore, the aim of comparison has been increasingly stimulated by the question on how and to which extent international and intercultural comparison can make its contribution to *building theories on modernity and post-modernity* with regard to their *globalising* trends. In particular, this question was updated through the stimulating impacts of the *World Systems Theory*, conceived by I. Wallerstein and its further elaboration in the sociological theories by J. Boli, J.W. Meyer and F.O. Ramirez and the comparative educational studies by Christel Adick (1992) and Jürgen Schriewer (1994).

On the other hand, Comparative Education is regarded as a field of research, which is open to *quasi-experimental* inquiries, this assumption to be traced back to Emile Durkheim's thesis about the quasi-experimental function of comparison in the social sciences. According to this assumption the international and intercultural comparison can be utilised as an *ex post facto* instrument for testing existing theories or single hypotheses. Within this function the comparison is „theory-bound in that sense that only entirely determined and problem-relevant empirical findings are selectively compared with regard to their compatibility with the theory to be tested“ (Czycholl 1975, p. 11). Harold Noah (1971, pp. 507 f.) even stated that Comparative Education is not aimed at „enriching and extending the meaning of country names as far as possible; instead we attempt to fill general, 'regular' and system-crossing statements with substance by introducing country (i.e. system) names only at that point where our power of making careful and cross-national generalisation is not sufficient. A comparative study is, according to its function, an attempt at replacing the names of systems (countries) by indicators for concepts (variables) to a wide degree“.

Contrary to these evolutionist targets outstanding comparative educationalists, such as Joseph A. Lauwerys and Franz Hilker, took the distinct position that the comparative method does not possess any „nomothetic power“, nor can it be classified as a „normative science“ (Lauwerys 1958, pp. 65-77; similar: Hilker 1962, pp. 136-138). In the beginning of the seventies Dieter Berstecher and Bernhard Dieckmann updated the contestable plausibility of evolutionist concepts in educational studies, particularly with their inherent statements about *inevitable* trends (Berstecher 1970, pp. 91 f.; Dieckmann 1970, p. 12). Their arguments, reinforced by references to lacking data and indicators have not lost their topicality until today, although the recent efforts undertaken by OECD and other international organisations and agencies signal certain progress in overcoming existing deficits<sup>7</sup>.

<sup>7</sup> Remarkable, though improvable, examples of this progress are demonstrated by: OECD (1995): Education at a Glance. OECD Indicators, and OECD (1996): Employment Outlook.

Thirdly, the identification of the aim of comparison is closely related to the controversial question, to what extent Comparative Education can make its contribution to the *improvement* of education and schooling and offer provisions for the devising of guidelines for actions<sup>8</sup>.

### 4.3 Two Main Methodological Approaches

The methodology of Comparative Education is rooted in the dualism of two main methodical approaches which have been embedded in science theory as well as in the history of education. They are defined by the concepts of *hermeneutics* and *empirical analysis*. These two approaches, in their turn, are characterised by internal differentiation and have distinct impacts on the conceptualisation and realisation of comparative inquiries.

The *hermeneutic* approach is aimed at „understanding“ by means of interpreting „texts“ and at a history-based perception of reality and ideas; it has been developed in the *humanities* (Geisteswissenschaften). The „classics“ of humanities identified „texts“ in their capacity as written documents, first of all of literary or historical nature; in recent years, however, this classification has been gradually extended and diversified. Nowadays hermeneutic interpretation includes, besides written documents, „texts“ produced and transmitted by the media (e.g. films and videotapes). In the *Comparative Research in VET* „texts“ of both types consist of primary sources, e.g. legal documents (bills, laws, decrees, curricula and syllabi, time-tables etc.), didactic and methodical recommendations and guidelines as well as textbooks on the one hand and secondary literature, provided by various studies on VET and curriculum development in this area.

The hermeneutic approach is complemented by the *phenomenological* approach, to be derived from Edmund Husserl's philosophical school of phenomenology. Hermeneutics and phenomenology, applied as competing methodical approaches, share access to life situations both on the base of the scholars' own experience and their aspiring for „understanding“ them; moreover, the legitimacy of their interpretative efforts is given by the *intersubjective verifiability* of their judgements. On the other hand they disagree with each other in that the hermeneutist relates his subject of research to its *historical* background, while the phenomenologist's interest is focused on the holistic interpretation of every life situation including questions about the emotional sphere of human attitudes and actions. Already at this point the comment may be justified that the phenomenological approach can make noteworthy contributions to Comparative Education, whenever attitudinal issues are put on the agenda. Yet, *Comparative Research in VET*, at least with respect to its *current* aims and tasks, is hardly in need of its application.

It goes without saying that the *analytical-empirical approach* has developed into the main, if not until today exclusive methodical instrument in *Comparative Research in VET*. It can be identified as the express counterpart, and at the same time, competitor of the hermeneutic approach in Comparative Education, having been developed and elaborated in the course of the 20th century. Special attention has been attracted by the comparative projects of the *International Association for the Evaluation of Educational Achievement* (IEA), which have been conducted since the sixties, focused on the assessment of subject-bound school achievements. Their outcomes have been increasingly appreciated by national and international educational authorities. The various methodical schemes and measuring instruments have been gradually diversified and refined which makes the IEA studies excellent models for *Comparative Research in VET*, both at the conceptual and the instrumental levels.

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<sup>8</sup> In this context it is worthwhile to make reference to Wolfgang Hörner's classificatory model of „functions“ to be allocated to Comparative Education. He distinguishes between (a) the *idiographic* function (search for the specific), (b) the *melioristic* function (search for better models), (c) the *evolutionist* function (search for the trend of evolution), (d) quasi-experimental trend (search for the universal). While the melioristic function can be immediately derived from the practice-bound motivation underlying comparative research, the three other functions are closely connected with the place, allocated to Comparative Education by the comparative educationalists as well as by their „neighbours“ in the context of the science system (see above).

The analytical-empirical approach has been adopted from the social sciences; it determines the „social science quality“ of Comparative Education which, in turn, takes itself an active part in its further elaboration. It is aimed at „explaining“ facts, relations and trends. In its first period, lasting over several decades, it distinctly concentrated on *quantitative* analysis, in particular by collecting and analysing *statistical data*. By introducing data analysis into the comparative process, it offers the possibility to search for „regular covariations“. Saul B. Robinsohn presented the following exemplary pattern: „If there arise in the situations,  $S^1$ ,  $S^2$ ,  $S^3$  ... the columns A and B, but in the situations  $S^4$ ,  $S^5$ ,  $S^6$  ... A-modified and B-modified, and so forth in growing precision, one can conclude from this a regular interrelation between A and B“ (Robinsohn 1973, p. 316).

The further progress of quantitative methods and their implementation in research practice has recently been accompanied by the devising the testing of *qualitative methods*. Within the comparative methodology they are applied in form of *ethnographic inquiries* and *case studies*. While contributing to the diversification of the analytical-empirical approach, these methodical counterparts also give rise to the „re-discovery“ of the hermeneutic and the phenomenological approach which had been somewhat repressed in the past decades (see above). As regards instrumentation, qualitative inquiries, on the one hand, adopt and adapt the basic instruments having proved their worth in quantitative inquiries (questionnaires, standardised interviews), while, on the other hand they make use of semi-standardised and open interviews as well as of portfolio techniques based upon written, tape and video records. In this context the „rediscovery“ of the hermeneutic approach is materialised by the revival of „text interpretation“.

Concerning the priority or even the exclusiveness of analytical-empirical against the hermeneutic approach, Comparative Education was dragged into the cross-disciplinary „struggle of methodologies“ which culminated in the late sixties and early seventies. Since the beginning of the seventies, however, the development has been marked by the „reconciliation“ of both approaches, insofar as widespread acknowledgement concerning their legitimacy has been reached. For Comparative Education Dieter Berstecher made the representative statement that „metrics“ and „hermeneutics“ must be conceived as „elements of one and the same method“ (Berstecher 1970, p. 77-82), this notion being used as the amalgamation of both approaches to be subsumed to the „comparative method“. This definition of „method“ is different from its application as a sub-category of these „approaches“ which is synonymous to „procedure“, „instrument“ or „technique“. In Berstecher's terminology „metrics“ comprises all procedures which are based upon measurement and, consequently, empirical analysis. His definition makes reference to both the humanities and the social sciences as the „roots“ of the „comparative method“. Needless to emphasise that the reduction of both approaches to „elements“ presupposes a concept of „education“ (Paedagogik, Erziehungswissenschaft) which denies any *clear-cut* allocation to *one* of both roots“ (*hermeneutics* and *empirical analysis*). Berstecher's statement is congruent with Robinsohn characterising the „comparative method“ as a „combination of historical interpretation, functional analysis, quantitative data processing and utilisation and, finally again, synthesising interpretation of the causes and the direction of a prospective or intended change“(Robinsohn 1973, p. 325).

The opposition of the analytical-empirical and the hermeneutic approach reveals that quantitative data as well as qualitative statements are open to comparative analysis and interpretation. Data processing, *per se*, resting upon mathematical and statistical inquiry, implies comparison; under this aspect *every* correlation and ranking can be taken as a kind of comparative method. On the other hand modern qualitative comparison refers to systematised content analysis for the sake of the identification of *functional equivalencies* or, as long as the hermeneutic approach is applied, to the traditional patterns of text interpretation.

Considering comparative educational inquiry in the *concrete* decision-making situation, the choice of *one* of the main methodical approaches is not at the researcher's „discretion“, but is primarily dependent on the *aim* of the intended comparison which is conceived from the theoretical or practice-bound frame of reference underlying the initiation of the given projects.

Adapting this basic thesis to the *Comparative Research in VET* entails, in the first case, opting for the generation of concepts and paradigms, e.g. concerning the function of „profession“ and „training“ in an economic and employment system which is focused on the postulation of mobility, flexibility and globalisation, while in the second case this adaptation necessarily leads to the initiation of projects aimed at improving the practice of employment, professional qualification and VET. In many cases the concrete project suggests the consideration of *both* approaches, according to the aim of comparison. However, even in such cases *choices* are almost inevitable with regard to the time factor (which approach has to come first or later?) or the importance each of the approaches is ascribed to in the whole research process or in its individual stages.

In general, *Comparative Research in VET* is entirely involved in the methodological considerations of Comparative Education. As regards the choice of the two main methodical approaches, the answer excludes any one-sided option. In view of the *number* of tasks to be fulfilled the demand for *analytical-empirical* inquiries is very likely to considerably increase. Wherever exact calculations are needed, valid and reliable data are required as a basis for planning, maintenance and development of institutions, the recruitment of teachers and trainers as well as pupils and trainees, the provision of budgets etc. In the first place this demand pertains to *quantitative* inquiries. However, these will have to be enriched by *qualitative* empirical studies wherever the statistical data need to be supplemented with findings resulting from observations of educational (or employment) situations and their documentation in form of the aforementioned records. Therefore, *complementary* studies are urgently needed, whereby the opposition of school-bound and job-bound training schemes (with „dual systems“ in the middle) may be considered as a paramount example.

It is this very example, moreover, which justifies the inclusion of *hermeneutic* interpretation in the given project scheme. It has become evident that the quality and success of systematised and cross-disciplinary job-bound training depends on the employers' conviction of the benefit of this form of training for the *employment system on the whole*. In the planning phase already the researchers must equip themselves with *basic* knowledge about historical foundations as well as the socio-cultural context which will be hardly achievable without the reference to „texts“, according to their availability and appropriateness with regard to the *aim* of the given comparative project.

#### 4.4 Further Methodological Considerations

Beside the opposition of the two *main* methodological approaches (the hermeneutic complemented by the phenomenological one) Comparative Education methodology is influenced by the following classificatory approaches:

- a) *Induction* and *deduction*: The inductive approach is based upon a „ranking order of acquaintance“ which lays the ground for the determination of the subjects of comparison and the definition of the *tertium comparationis*, this criterion being the constant for the definition of the concrete variables to be derived from the preceding subject analyses. On the other hand, in the deductive approach the *tertium comparationis* is defined at the beginning (frequently resulting from a previous comparative inquiry) in the form of a categorial system. In the *Comparative Research in VET* this approach is frequently applied in big projects initiated by international organisations. Its advantage consists in the chance of a stringent and logical result. Its limited value, however, lies in the danger that the internal plausibility and cohesion of the analyses of the subjects of comparison may not be sufficiently re-examined. Furthermore, the reliability may be restricted by a static treatment of the *tertium comparationis*, and, therefore, by the neglect of modifications whose need may arise in the *process* of the inquiry.
- b) *Macroscopic* and *microscopic* comparisons: The allocation of a comparative study to one of these two types can be motivated by the category within which the given comparison has been conceived and planned. This category has been identified by the *territory* (comparisons

of local, regional, national or cross-national range) or by *other categories*: culture, ethnicity, social stratification, age-group. Furthermore, the decision is rooted in the choice of the dimension, defined by *total analysis* or a confined area of elements and/or *aspects*.

- c) *Relative* and *absolute comparisons* are classificatory types immediately related to the issue of *value judgement*. In the American evaluation research beside Lee S. Cronbach and Michael Scriven, Robert E. Stake thoroughly investigated this issue by devising an evaluative matrix as an instrument to relate learning aims and objectives to absolute and relative norms, the latter derived from *one* subject of comparison (Wulf 1972, p. 109). The comparative analysis is aimed at the identification of „congruencies“ at the beginning, in the course and at the end of the evaluation process to be attained by the comparison of structures concerning norms and observed real situations. It is preceded by a pre-stage focused on comparisons within these structures with regard to their logical and/or empirical „contingencies“ (Wulf, *ibid*, p. 197).
- d) Ekkehard Eichberg made the distinction between comparisons aimed at the exploration of *homologies* or *analogies*. Their applicability is dependent on the degree to which subjects of comparison can be identified. Attaining *homology* requires the availability of a broad comparative *base* and an elaborate scale system whose evaluation and interpretation ought to enable detailed „insight into the structures“ of the subjects (Eichberg 1972, p. 24). Efforts to identify *analogy* are caused by the more or less restricted access to the subjects of the intended comparison, therefore allowing partial comparison, usually based upon the application of rough scales. Such studies can be refined in the course of the research process and, at least, end up in results to be utilised as preconditions of searching for homology. The outcomes of the comparative analogy studies are rather „modest“ and their quality consequently, is restricted. However, in many cases they present the only chance of cognitive progress, in particular when required data are literally missing or unreliable. In this context the comparative researcher is frequently confronted with statistical materials whose internal gaps and deficiencies are not expressly stated - which, at the same time, refers back to the aforementioned limits of the analytical approach in general.

Finally, attention should be paid to a procedure which does not deserve the characterisation of a „method“, but has become important to Comparative Education nevertheless. It is the so-called *implicit comparison* (Froese 1983; Mitter 1976, pp. 86-100) which, quantitatively speaking, may be called the widest-spread „comparative“ approach, if one considers bibliographies dealing with publications in Comparative Education. It is given by the comparative educationalist's intention not to engage in an explicit and systematised comparison; yet he/she implicitly relates his findings in the area of foreign subjects (*Auslandspädagogik*) to his knowledge and experience of his own national system or cultural environment. For example, inquiries on the French education system, even if the thematic range is equal, can differ from each other in respect of the „national background“ of their authors: British, American, Japanese or German. Besides the „implicitness“ can also be related to the target-group a comparative study is addressed in a special presentation, in particular a lecture or oral report. The more the author (speaker) takes the specific interests of his/her potential readers/audience into account, the more he/she will attract their attention and acceptance. The relevance of the criterion arises above all, in cases, marked by a target-group whose members are ignorant of comparative views and categories.

#### **4.5 Possibilities and Confines of International and Intercultural Comparisons**

„Comparing“ can be traced back to its fundamental function of setting subjects together so as to ascertain how far they agree or disagree. In this view, referring back to its aim of determining equality, similarity and difference the range of „comparing“ is, in principle, ubiquitous. For instance, the popular slogan that „apples cannot be compared with pears“, can be easily contradicted by the definition of various *tertia comparationis* to be derived from their sharing

common features such as plant, fruit, food, etc. or related to special questions, such as the time of ripening, the capacity of water and sugar and the degree of digestibility.

However, that does not mean that comparisons are reasonable in any case with regard to the intended aim or the given concrete situation. On the one hand confines are set by the content of the theme for choice. To give another example, it is certainly worthwhile comparing training schemes in primitive and modern cultural manifestations (e.g. „bush schools“ versus forms of modern VET) in view of categories rooted in cultural anthropology or ethnology. Yet, the reply will be certainly different for those who are engaged in *Comparative Research in VET*, focusing their efforts on current or/and prospective questions and needs. On the other hand limits are set by action-oriented requirements the researcher has to meet when accepting a distinctly defined project with regard to aim, content and time. This limitation includes policy orientation in its widest sense from firm-based planning to international and supranational decision-making.

## **5. STATE OF THE ART: SELECTION OF COMPARATIVE STUDIES ON THE SUBJECT VET (METHODOLOGICAL AND THEORETICAL CONCEPT, SUBJECTS)**

### **5.1 Methodological and theoretical concept of selected comparative studies and their subject**

The following section takes up examples of current studies on *Comparative Research in VET* and describes the findings as well as the methodological concepts. Using the methods of textual criticism, it also examines the tension between the findings of these studies and the fundamental considerations on the methodology of international comparison developed here. The focus of attention is, therefore, on studies conducted or commissioned by international organizations and research institutions.

The publications on *Comparative Research in VET* can be standardised by their methodological and theoretical concept and their subjects. Essential questions within the theoretical concept are the determination of the aims of the comparative study, the definition of a *tertium comparationis* and the description of the chosen objects. The geographic district of the analysed studies are the EU, with the exception of those Studies with world-wide dimensions.

Frequently *synoptic studies* – the designation of the European Commission is „European Synthesis Report“ – dominate in the field of VET. A typical example is the research study: *Continuing vocational training: Europe, Japan and the United States* (edited by: Brandsma, Kessler, Münch, 1996). Its contents present analyses of 19 national continuing vocational training systems. The editors of the study confine themselves to the destination of the structure of the frame with six headlines: introduction, concepts/definitions/ main characteristics, access and participation, supply and providers, demand and planning, conclusion and further development. The adaptation of the headlines within the studies is turned out in different levels. But the presented 19 studies are very informative and are a good basis for continuing comparative analysis's.

In a review of *Continuing vocational training*, Grünewald refers to the preface to the Synoptic Tables: *available data about continuing vocational education in the 12 Member States* (Grünewald 1997, pp. 46-47). He stresses a core sentence which relates to the problems of synopses:

“The presentation of the data in the form of an overview does not mean that these data are comparable. The synoptic description of training systems and the relevant concepts listed in the annex of continuing VET in the Member States clearly show that each country has its own structure and function in the field of continuing VET. Hence in order to truly understand the tables, we have to know about these elements and concepts and from the very outset avoid comparing things which are not comparable.” (European Commission, FORCE, 1992, p. 7)

Grünewald refers in this connection to the problematic nature of the *comparison indicators* and comes to the conclusion that “political decision makers, too, will not be spared having to adopt a more differentiated approach which is related to the respective national context when it comes to issues of continuing VET.” He creates the link between the *synoptic tables* and the *Continuing VET* study based thereon. He confirms our findings and says that the 19 national studies are very reliable.

Grünewald did not include one statement from the preface of the *synoptic tables* [...] to avoid comparing things which are not comparable”. This statement refers to a core sentence in *Theory and Methodology of International Comparisons*. In the introductory chapters we stated that the very differences between systems and system structures are only “noticed” when they are compared (European Commission, FORCE, 1992, p. 7). The problematisation of this statement in the preface would have led directly to a request being put to Brandsma et al. to give more consideration to the comparison aspects.

Unfortunately the editors do not explain the essential questions focused on the determination of the aims of this comparative study and the definition of a *tertium comparationis* in the introduction. Some authors of the national reports within this synthesis report take up questions in this dimension. They analyse the interrelations between the structures of the national VET- and education system and continuing VET. But that was not an essential question of the editors. If these national studies had been incorporated into a *comparative study*, then the hypothesis of Grünewald “that the intensity of participation in continuing training correlates to a large degree with the level of general education and initial VET which meant that continuing education was never compensatory” would have had to be re-examined.

The problem of the methodology and *theory of comparisons* is discussed in its essential dimensions by Marc Ant, Jeff Kintzelé, Anne Van Haecht and Richard Walther (1996) in a synoptic report for the European Commission: *Reporting, system on access, quality and volume of continuing vocational training in Europe*. In relation to the other social sciences they develop a methodological concept for their research.

In the editions of CEDEFOP there are a lot of *comparative analyses, synthesis reports and CEDEFOP documents* with a similar methodological and theoretical concept.<sup>9</sup> On the other hand the researchers in the field of VET adapt the methodological and theoretical concept of comparative education. They suggest that comparisons are confined in their results. They define fundamental issues and questions and show that there are interrelations between the subjects of research and other dimensions of the national education and VET systems and the historical dimension (Drake 1994).

The result of the analysis of reports in VET with a comparative dimension is ambivalent. But the discussion about the methodology and theory of comparisons in VET becomes more and more important. The intensity of international co-operation promotes the increasing importance of international comparisons. Within the EU the Commission, CEDEFOP, the ETF and national research institutes (BIBB/Germany, CEREQ/France) pick up more and more this dimension of *Comparative Research in VET*.<sup>10</sup> By way of summary, a distinction can be made between the following approaches:

- Country studies on defined areas of VET are considered in parallel without structures and the study areas being substantiated and delimited in a subject specific manner in respect of a comparison goal and comparison interest and without the *tertium comparationis* being explicitly developed. The studies which are normally conducted in parallel by different authors vary considerably in respect of the quality referred to the subject and the depth and

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<sup>9</sup> For instance: The coherence of compulsory education, initial training and adult education in the countries of the European Economic Area. CEDEFOP Panorama. Thessaloniki (Thermi) 1995.

<sup>10</sup> Repeated reference was made to contributions of the Commission and CEDEFOP. ETF supported programmes such as Kuebart (1996). BIBB is conducting a series of comparative projects: cf. BMBF 1997 p. 186 sq; and working programmes of the Federal Institute for Research in VET/Germany 1995.

width of examination. These research studies are very valuable as a basis for comparative studies if they succeed in modifying the structures and contents of the country studies in such a way that serious comparative studies are possible.

- In the widespread synoptic presentations or parallel country studies, often supplemented by comparative evaluative analyses, attempts are made to define and delimit areas of comparison normally without the explicit presentation and justification of the interest of comparison and the *tertium comperationis*. The contents of the comparison areas seem to stand objectively alongside each other although implied, cognition-guiding interests determine their delimitation and their contents.
- The „real“ comparison research scientists rapidly fall victim to the fascination of the simplifying theory formation. Before extensive, methodologically sound country studies and complex and extensive comparison studies based thereon can be undertaken, types and models of VET must be established, sometimes with a classification of the national systems. These are often derived on the basis of sound justification but without the necessary references to the empirical foundations. In most cases the authors in Europe or around the world restrict themselves to a few concrete models in which the risk of stereotype or artefact formation (Georg 1997, p. 158) is obvious. This typification is not restricted to VET but is also used in general overviews of education. Vaniscotte distinguishes for example between Scandinavian, Anglo-Saxon, Germanic and Latin and Mediterranean types and classifies the education systems, including VET of the 15 Member States of the EU, using this somewhat rough classification (Vaniscotte 1996, p. 158). Within the logics of this stereotype formation the transformation countries of central and eastern Europe would have to be classified under the “eastern or Russian” type. The results obtained from a serious comparison can be found for example in Kuebart et al and in the International Handbook of vocational education and Training (IBHH) (Lauterbach 1995/1997, p. VGL - 1-132; Kuebart, 1996).

In the field of VET a differentiation according to learning venues is especially popular. These are often equated with systems of VET, for instance Münk (1997, pp. 5f.) distinguishes between full-time schools, on-the-job training and apprenticeship without pointing out that the actual learning venues (e.g. practice/company, (vocational) college and VET-Centre) are linked to different types of VET and their regulatory patterns. Lauterbach already pointed out in 1984 that the differentiation based on learning venues should be extended to at least five types (Lauterbach 1984, pp. 25 ff.). Following an extensive, empirically sound study (1995) the concepts of the dominant learning venue and guidance learning venue were introduced in order to reflect the complexity of the subject.<sup>11</sup> On this basis, a typification was no longer possible which would have corresponded to a priori stipulations/models. For each national path of VET in the broadest sense, the customary learning venues could be detected.

The different structures, which are identified when comparing national systems of VET, when comparing system elements or functional comparisons, can be explained by the cultural specificities and the historical context. National systems of VET along the lines of the colloquial use of the concept system, which refers to a larger entity, do not exist in all countries. If, by contrast, reference is made to the system concept (Hörner 1996, pp. 15-17; Luhmann 1996, pp. 15 f.; Schriewer 1987, pp. 76 ff.) which has established itself in the social sciences, internal and external links are the decisive features. The demarcations vis a vis the outside world and the functional linking of the subsystems amongst each other are described as a system. These linking opportunities mean that VET can also be described in countries as a VET-System which would not have been included if reference had been made to the colloquial term.

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<sup>11</sup> Lauterbach (1995/1997) . Page VGL – 69 ff. and 104 – VGL. Kell (1995, p. 380) makes a similar assessment and takes the example of German vocational education (dual system) to discuss the differences between the system issue and the learning venues and shows that the discussion about the decision for dual, trial or plural system is involved.

Hence, the result is “that the national systems of VET despite obvious similarity proved to be unique when analysed in greater depth. Despite these constraints and reservations, categories and types should be established because they sharpen the eyes for structures, functions and dysfunctions which can be found beyond national borders in the national systems of VET. This increases understanding of the system and helps to avoid the creation of stereotypes and artefacts.” (Lauterbach 1995/1997, p. 114-VGL)

- In a few rare cases national studies, comparisons of structural elements or functional comparisons are conducted on the basis of an explicit methodology of comparison. What can be very much recommended as an introduction to the practice-related methodology of comparison is the introduction by Wolfgang Hörner in the latest edition of Educational Systems in Europe. Unfortunately, this methodological section is not backed by comparison results. They are to be found in the Internationales Handbuch der berufsbildung or in the study by Richard Koch. In both cases they give an introductory methodological explanation of comparison (Hörner 1996, pp. 13-29; Koch, Reuling 1997; Lauterbach, Maslankowski, Mitter 1995/1997, p. VGL - 1-132)

All research scientists who work in the widest sense on comparison must face one fundamental difficulty which is the presentation of the most important concepts and the description of the systems examined in the language in which the study has been prepared. In most cases, translation is the path selected which means that the *Scuola media* ends up becoming a lower secondary school and the *Istituto tecnico* becomes a technical grammar school. If the translators “are lucky” then the concepts in the translated form correspond to the original concept but normally the meaning of the word in the different languages is not the same and this often leads to major misunderstandings. Therefore if at all comprehensible for the reader, the terms should be left in the original language. Translation should be more along the lines of a glossary. The translation should only be used in conjunction with the original language term or its abbreviation. The major difficulties to be expected in respect of the languages used are demonstrated by the many helpful glossaries which often themselves seem to fail because of the very problems described here.<sup>12</sup> These problems are also encountered in translations of documents on VET in the official languages of the EU. Lipsmeier und Münk illustrate the less than accurate translations using the examples of a few important key terms (Lipsmeier 1994, pp. 9 ff.).

## 5.2 State of the art in selected countries (France, Germany and others)

This stocktaking of *Comparative Research in VET* focuses on the theoretical approaches and, more particularly, on the methodology of the studies. Hence it is not our task to give an overview of the innumerable research projects, publications or co-operation. The evaluation alone of the research undertaken by the Information and Documentation Department of the German Institute for International Educational Research (DIPF) into generally accessible literature and project databases on *Comparative Research in VET* in Europe revealed several hundred projects involving at least two partners and a maze of bibliographical references. The processing of this material alone would have been tantamount to a large independent project. We have selected by way of example research projects and publications. In this context, the emphasis was clearly on the methodological aspects. This selection is documented in the selected bibliography.

*Comparative Research in VET*, a young science, is still very ambivalent in its methodological traits. Sound methodological approaches, such as those used in the comparative social

<sup>12</sup> Cf. as examples for glossaries:  
 EURYDICE, CEDEFOP: *Strukturen Allgemeiner und Beruflicher Bildung in der EUROPÄISCHEN UNION*. Luxemburg 1995. This publication is also available in other official languages.  
 CEDEFOP: *Glossarium Vocational Training*. A comparison of concepts from 12 Member States of the European Union in 9 languages. Tessaloniki 1996.  
 Institut für Arbeitsmarkt und Berufsforschung: *Glossar zur Arbeitsmarkt und Berufsforschung*. Nürnberg most recent edition.  
 Nölker, Helmut; Schoenfeldt, Eberhard: *Glossar: Internationale Berufspädagogik/Glossary of International Vocational Education/Glossaire de la pédagogie internationale de la formation professionnelle/Glosario de pedagogia internacional de formation profesional*. Sindelfingen 1985.

sciences, and, thus, also in *Comparative Education* as the basis for scientific studies are still not always used. *France* and *Germany* have been selected as geographical areas because in the scientific discipline of *Comparative Research in VET* they are examples of the two models and individual research scientists and research institutes co-operate on a whole range of projects.

The reasons for selecting France and Germany cannot be understood to mean that both countries are particularly active in research on *Comparative Research in VET*; this can quickly be proved: research scientists in smaller geographical EU Member States such as the Netherlands, Austria and in northern European countries are heavily involved in comparative research. This is not surprising since dealing with neighbours is almost an automatic process given the geographical framework and activities across national borders in the widest sense are by no means unusual. A number of research scientists and institutes can also be named for the United Kingdom, one of the cradles of *Comparative Education*.

### 5.2.1 Germany

In Germany the disciplinary and institutional independence of *occupational and economic education* and *labour market and occupational research* have been guaranteed for a long time on various levels. The incorporation of teacher training into technical vocational schools in the university sector, particularly since the 1970s, led to the creation of many chairs for VET. Teacher training for vocational schools in the business sector can, therefore, look back on a tradition spanning more than one hundred years. Their academic training was very controversial with the setting up of the universities for economics already before the turn of the century. The central research institutes: *Federal Institute for Vocational Training* (BIBB) and its precursor BBF (since 1970) and the *Institute for Employment Research* (IAB, since 1967) were set up three decades ago. Furthermore, for more than one hundred years the discipline of occupational and economic education has been on universities' curriculum. The increasing topicality of subjects/problems since the beginning of the 1990s which move beyond the borders of the single German states and the federal state horizon encouraged a more international approach to *Comparative Research in VET* which became increasingly relevant. Today the institutes for occupational and economic education at universities are increasingly focusing on international and comparative issues particularly because the research projects with a geographical focus on Europe and countries of development co-operation are becoming increasingly numerous. Here we would merely like to mention the work of Georg (Open University, Hagen), Greinert et al. (Technical University, Berlin), Lipsmeier, Rothe (Technical University, Karlsruhe), Arnold and Münch (University Kaiserslautern), Schoenfeldt (University Kassel), Böhm, Rauner et al. (University Bremen), Paul-Kohlhoff and Rützel (Technical University Darmstadt), Achtenhagen (University Göttingen, Klaus Beck (University Mainz, Dieter Euler (University Nürnberg-Erlangen)).<sup>13</sup>

Besides the direct links of these research scientists and institutes to *Comparative Research in VET* research institutes which have their research foci in comparative education such as the *German Institute for International Educational Research* (DIPF) in Frankfurt am Main and the *Institute for Comparative Educational Research* at the Ruhr-University Bochum, or in comparative social research such as the *Institute for Social Sciences Research* in Munich, have developed a series of fundamental studies on *Comparative Research in VET*. These institutes again have a number of partnerships with university institutes or independent research institutions particularly in other European countries.

In respect of the question of interest to us concerning the theory and methodology behind the research results, it becomes clear that here, too, the assessment is highly ambivalent. The following section 5.3 examines the most important results.

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<sup>13</sup> cf. also Bibliography.

### 5.2.2 France

In France the starting position was quite different. Here research into and the science of VET were not able to establish themselves as an independent discipline. The interest in issues surrounding VET is growing constantly but is not linked with the setting up of one or more scientific disciplines. Since the beginning of the 1970s *Comparative Research in VET* has established itself as a research area as a result of central state or regional demand. In the beginning during the expansion of the education system, research focused on providing data and information on VET. The employment crisis which entered the stage at the beginning of the 1970s, and which affected young people particularly badly, triggered a reorientation which also involved the examination of a centrally planned and controlled harmonisation of the education sector and labour demands and an improved incorporation of certain groups or training courses. These links between education and employment which have continued up to now are still more the domain of French labour sociology.

Educational sociology in most industrial nations has addressed, since the mid nineteenth century within the framework of education expansion, the link between equal opportunities in access to education and social inequality. In this research field a large number of international comparative studies was also examined. By contrast, French educational sociology was characterised far more by the theory of cultural reproduction. The representatives of the reproduction theory claimed the relative independence of the cultural sphere and thus also of the school from the production sector. Since this explanation applies to the functioning of the entire education system, special issues of VET are neglected and institutions of VET are merely stigmatised as not being general. Assessed from this angle the hierarchy of general and VET schooling was strengthened. The non-general education venues were merely viewed as extensions of school learning venues which offered a second chance to the victims of school selection.

The central research institutions of *Research in VET* in the defined meaning are rather to be found outside universities. The inadequate international presence of French *Researchers in VET* has not so much to do with this constellation but far more to do with the fact that it was only from the 1970s onwards that this research area was given state assistance. At the *Institut national de recherche pédagogique*, a department for *Research in VET* was set up for the first time in 1971. The *Centre d' Etudes et de Recherches sur les Qualifications* (CEREQ)/Marseille was founded in 1970. A greater anchoring of *Research in VET* in universities could only be observed since the 1980s; for instance the business science faculty of the University of Dijon founded in 1971 its *Institut de Recherche sur l'Economie de Education* (IREDU) concerning questions of educational science. An anchoring within educational science is moving ahead very slowly also because this only really emerged in the course of the 1970s as an independent university discipline.

The reason why the inadequate presence of French Research in VET as in comparative education is being bemoaned even today not least by the French has to do with the constitution of cognition theory and with the organisational structure of research. For instance Blossfeld and Shavit refer in a comparative study to the question, "To what extent has the relationship between parental socio-economic characteristics and educational opportunities changed over time and why?" in connection with the hypothesis based on the *theory of cultural reproduction* as developed by the French educational sociologists. In the comparative study of 13 countries, which also takes in countries like Germany, England and the USA, France is missing without any plausible reason. Aside from that this, comparative study was well developed in terms of methodology. The national studies are based on theoretically substantiated hypotheses, in some cases the same structures and a cognition-guiding issue, the *tertium comperationis* (Blossfeld, Shavit 1993).

*Comparative Research in VET* has been given considerable support since the beginning of the 1990s by means of the opportunities offered by the EU, e.g. at present in the EU's LEONARDO DA VINCI programme. CEREQ and other institutions, e.g. the Centre INFFO in Paris are involved in a series of studies in the field of *Comparative Research in VET*;

reference should be made in particular to the work of Lucie Tanguy (1982, 1987, 1994, 1995; partly with co-authors).

### 5.3 Development of the Methodology in *Comparative Research in VET*

In the stocktaking it was shown why *Comparative Research in VET*, a young science, should seek to establish a link with Comparative Education. In the following chapters the methodological principles were therefore developed with a direct link to Comparative Education. When developing theories of *Comparative Research in VET*, by contrast, the research findings of Comparative Education have been only included in a reticent manner. It seems that many long since settled controversies in Comparative Education and the related social sciences (psychology, sociology, political science) have been taken up again and the scientific discourse about methodological development which began with Julien de Paris (1817) is to be re-enacted but with the constraint that fundamental papers such as those by Julien or Sadler, which gave major trendsetting stimulus to the development of Comparative Education are not available. The situation in theoretical discussion is, therefore, developed using a few typical positions. The fear expressed again and again that some VET-systems did not lend themselves to comparison because they differ so much in their structures from those of other national systems is typical of the misunderstanding that only similar things can be compared<sup>14</sup>. An answer has already been given in this paper. Hence the positions are very different. Georg defends this point of view but, at the same time, refers to the "historical and cultural specificities of the social arrangements of VET and labour organisation" (Georg 1997, p. 163; cf. also Bechtle 1989, pp. 88-90). He substantiates these arguments very impressively when comparing VET in Japan and Germany by referring to the respective industrial culture which imposes limits on any attempt to present a universally understandable VET policy as was done, for example, by the World Bank up to the 1990s (Georg 1997).

Münch provides a counter-argument to the results of Georg. Whereas Georg warns about the creation of artefacts and advocates well-founded studies as the basis for comparison, Münch refers again and again to the "very limited scale of the contribution". He „motivates“ – this is his delimitation – with a view to a „closer examination of details and links“ and at the same time undertakes a daring „triple comparison“ in the form of tables and overviews of the Germany, Japan and the USA. In this respect he uses as the *tertium comperationis* the artefacts of Greinert with a breakdown into operating model, co-operation model and school model. This considerable simplification of the presentation according to Münch should help „to develop a suitable exploratory instrument for a sensible linking of overall views (system variants) and individual aspects“ (Münch 1997). We will have to wait and see whether this provocative view of Münch will contribute to increasing the motivation of various players to examine specific aspects of *Comparative Research in VET*.

Whereas in the case of Münch „basic models“ are to be found as system variants of VET at the centre of his explicitly formulated comparison interest and he wants to obtain results on this without methodologically substantiated empirical studies, Rothe, when comparing the VET-Systems in France and Germany, chooses the path of a reliable database. He presents the main subjects, describes them briefly, develops on that basis problem areas such as vocational guidance and describes the structures of individual study areas (sub-elements) as a juxtaposition in a kind of synopsis. The facts obtained are impressive, the comparison results by contrast are somewhat limited on the formal level. He offers a „quasi neutral“ study which identifies differences, similarities, and common ground and calls on the user to make the comparison himself and to develop assessment and decision making criteria for that purpose. In the 60s and 70s there was considerable controversial debate about the „neutral“ theory of comparison within the framework of the positive discussion (Clayton 1992; Noah, Eckstein 1969; Kazamias, Schwartz 1974). In the case of Rothe the paradigms and the cognition-guiding interest of his „neutral“ juxtaposition can be guessed. In the summary he

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<sup>14</sup> Cf. chapter 2.1 Comparison as a basic methodological principle in science.

advocates in Germany parallel programmes to the dual system in the form of full-time vocational schools.

Besides the approaches which like Rothe (1995) advocate a *neutral total analysis* or those of Greinert and Münch, which don't want to get involved in total analysis, but anticipate basic models, other research scientists focus on functions and theories, which place research in VET at the centre of their *problem approaches* in the full knowledge that total analysis is scarcely possible in a comprehensive form. Of great topicality are e.g. the theories of a link between education and employment, the occupational phenomenon, adjustment of VET-Systems to economic change, funding of VET, contribution of VET-Systems to overcoming structural changes, relationship between initial VET and continuing education and certification problems (Blossfeld 1993, 1994; Deißinger 1994, 1995).

Other comparative analyses go beyond the problem approach. For instance comparative studies on the social control of VET-Systems such as those undertaken by Koch (1997) or a broadly based comparison involving several types of national VET-Systems (Lauterbach 1995/1997) can come close to total analysis.

## 6. SUGGESTION FOR A METHODOLOGY OF COMPARATIVE RESEARCH IN VET

Comparative studies in Comparative Education are becoming increasingly important within the framework of the debate on globalisation and increasingly close political alliances. In the field of Community-VET-Policy, the EU has, e.g. by means of the Leonardo Da Vinci programme, provided major stimulus for *Comparative Research in VET*. Besides the „professionals involved so far, many other people (research scientists, politicians, social partners etc.) will also have to enter the field of comparison or are being forced to interpret the results obtained in a critical manner. Caution must be used when applying the results which are drawn not only from quantitative and/or qualitative scientific studies but also from statistical ones. We have demonstrated in various examples how misinterpretations are possible and the norm.

Furthermore, it could be proven that the methodological concepts are often not substantiated in studies on *Comparative Research in VET* and in many cases are purely coincidental. For a number of research scientists the methodological issues were of marginal importance. That is why the results are not free of controversy already because of the missing methodological basis. Critical assessment of research results, in which the methodological concept and the main interest of the comparison have not been revealed, should therefore be initially conducted on this level. It may be the case that a review of the underlying methodological structure will also lead to a review of the study results. In the case of our study which seeks again and again a link to *Comparative Education*, the major importance of the methodological approach could be confirmed for research findings of *Comparative Research in VET* and also in neighbouring disciplines.

The following proposals for the methodological approach have been established not only in our stocktaking of *Comparative Education*, but also in conjunction with the work by Hilker, Robinsohn and Mitter. They also draw on experience which was obtained during comparative studies for the International Handbook of VET (IHBB). We are basing this in particular on the proposals of Hilker (1962) and Robinsohn (1973) which were also examined within this report.<sup>15</sup>

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<sup>15</sup> Cf. the proposals of Hilker and Robinsohn of this paper; Mitter 1989, 1992, 1996; Keevers, Adams 1994.  
Hilker, Franz: Vergleichende Pädagogik. Eine Einführung in ihre Geschichte/Theorie und Praxis. München: Hueber 1962.  
Robinsohn; Saul B.: Vergleichende Erziehungswissenschaft. In: Braun, Frank; Glowka, Detlef; Thomas, Helga: Erziehung als Wissenschaft. Stuttgart 1973, pp. 315 - 355.  
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- a) Creation of and justification for comparative classifications (system categories, functions and elements) for national studies/individual studies and the comparison, advancement of hypotheses, determination and substantiation of the *tertium comperationis* on two levels: *comparative goal(s)* and *comparative basis*;
- b) Description, development, links, process and analysis of elements on the system level (basis is normal the nation state);
- c) Synoptic parallel analysis of national elements and system levels;
- d) Juxtaposition as preparation and basis for the comparison of important classification characteristics (types, categories, models, development trends etc). The importance was documented under (1) and is the determining factor in the establishment of the main areas in the stipulated classification characteristics and in the formulation of the *tertium comperationis*. The comparative studies refer again and again to (2) and (4);
- e) Functional comparison of several systems by means of comparative analyses;
- f) Identification of special features of individual systems by means of issues being raised across systems (e.g. idiography, evolutionary function, quasi experimental function) by means of comparative study;
- g) Grouping of special characteristics to create types and classification of the individual system studies in the relevant types;
- h) Comparison of the „national“ classification characteristics processed in the juxtaposition; attempt to create categories;
- i) Summary of results, megatrends (development trends across systems), hypothesis verification or falsification, theory formation;
- j) Examination of theories in reality (e.g. national system, single function, dysfunctionality) action research, policy advice.

These proposals on the methodological procedure in the case of comparative studies cannot include in their overview-like presentation the fundamental methodological problem areas discussed so far such as consideration of the historical dimension, the same development level of „systems“, the system issue, the links between culture and system traits etc. They are, however, essential conceptual preconditions in the case of practical comparative research.

Furthermore, reference should be made once again to the „venerable“ principle of *Comparative Education and Comparative Research in VET* which Barber reminded us of in 1974, namely that the study design for comparative studies can only really be developed by scientists who have extensive system knowledge (Barber 1972, 1974).

## 7. PROSPECTS

In his analysis of the „state of the art“ Stephen Heyneman concentrates on emphasising the discrepancy he has observed between the growing need for political and economic agencies for comparative inquiries and a „gridlock of ideas“ (Heyneman 1993, p. 380). He himself decidedly gives his opinion in favour of research policies to be orientated to this need with regard to choice of themes, determination of aims and methodology. This view entails the extension of his range of observation, within which the extra-university „periphery“ (e.g. parliamentary committees, bank conferences, meetings of foundation boards, company marketing seminars) increasingly gain weight in relation to the „centre“, occupied by the universities. In the narrower sense national governments and administrations as well as the big inter- and supranational institutions, organisations and agencies (EU, Council of Europe, OECD, UNESCO, the World Bank, etc.) are to be included in Heyneman's priority list which, in general, needs to be considered by *Comparative Research in VET* as a stimulating appeal.

Confronted with Heyneman's interpretation of the „state of the art“, universities and extra-university research institutes are challenged to break out of the „gridlock of ideas“ and to engage in policy-oriented tasks (in the widest meaning of this term) which is already mirrored by a great number of research programmes and projects. This engagement is not only ne-

cessitated by their growing dependence on available financial resources, but also by claims raised by the members of the education systems: teachers, trainers and tutors, parents, administrators and, last but not least, pupils, students and trainees. Accepting „external“ demands must not mean, of course, neglecting the continuing efforts in the theoretical field to be focused on the re-examination of content and methodology. Besides overcoming theoretical („inner-academic“) and pragmatic (economic, financial, political) deficits, *Comparative Research in VET* will continue to be disturbed and restricted by the „unreliability and narrowness of educational statistics“ (Heyneman 1993) and, therefore, make its contribution to develop and refine the mechanisms for collecting and analysing educational information.

Beyond the criteria which are immediately related to its „basic strategies“, *Comparative Research in VET* must continue to cope with issues concerning its *thematic* range. Besides the „classical“ themes which have not become obsolete at all and are to be identified in the system of VET at the secondary level, new areas of research have become more and more relevant, such as further VET with its complex and flexibility-oriented structures, the interdependence between VET with its „general“ (liberal) counterpart<sup>16</sup> on the one hand and the employment system on the other, the special interrelation between (non-academic) VET and higher education; furthermore issues concerning attitudes and socialisation processes of youth and adults; finally, interrelations among technology, culture and education and, in particular education and multiculturalism, both in view of the challenges caused by growing mobility and migration.

Many of the subjects suggested here are already focal points of current *Comparative Research in VET* within the EU and are extensively dealt with in this *Report on Vocational Training Research and Development in Europe*. This part of the report discussed in great detail the methodological challenges which have to be tackled in comparative studies. If the „dream“ of Europe is to become true, then *Comparative Research in VET* has an important task to assume. In this context comparative studies on the functions and areas (problem approach) as suggested for example by the *Study Group on Education and Training* are very important as the basis for the political decisions behind the design of common structure elements between the individual Member States of the EU.

When identifying all these thematic areas, even taking into account their exemplary restriction in this context, comparative researchers have to tackle the following *basic questions*:

- „How do the ‘others’ identify the problem posed?
- Why are they concerned by this problem (in the given historical situation)?
- How do they try to solve this problem?“ (Mitter 1989, p. 1257)

By answering these and further questions comparative education and VET researchers are challenged to contribute to extending and elaborating their field of work (in thematic, methodological and general-theoretical terms) as well as to offer their support to policy-makers and „practitioners“ (in the widest meaning).

Thanks to these study results, a series of EU wide structures could be developed which are viewed by individuals as being important for their career development. In the case of the utilitarian comparative studies, one main goal of *Comparative Research in VET* should not be lost sight of. It was already stressed by the fathers of comparative research Jullien de Paris and Michael Sadler (Julien de Paris 1817; Sadler 1900). Whereas Jullien’s approach was nomothetic, i.e. the identification of laws, Sadler stressed the special case (idiographic) in his search. Both have contributed to developing further one objective of *Comparative Research in VET*, understanding of what so far were foreign education and VET-Systems. This understanding of the structures in what had been foreign systems prepares the way for the identification of common values between the nations in the common house of Europe.

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<sup>16</sup> In this context the impacts of *illiteracy* (including the attempts at removing it) on vocational education need to be given distinct attention, since this deficiency is not only restricted to developing countries, but, to a growing extent, also concerning „developed“ regions.

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