



Institut für Höhere Studien • Institute for Advanced Studies Lorenz Lassnigg

# VET-research in Austria - National research report 2003

Contribution to REFER-net<sup>i</sup>

## Some traits of the basic structure of educational R&D and VET research in Austria

The report from September 2003 has given an overview about basic trends in Austrian VET research. VET-research is only marginally based in the university system,<sup>ii</sup> and therefore mainly focused at applied research questions, main financial sources are invested from the labour market authorities, and therefore there is no clear separation between VET research, research about occupational development and labour market research.

During the last decade the market has changed and diversified very much by the set up of a research branch of the public employment service (AMS) and by the development of a number of new institutes providing services in that area (most of which, however, are fairly small units). The Federal Ministry has set up a series of edited books about "Innovation in VET", and AMS has also taken steps for the improvement of communication (by the set up of a research platform)<sup>iii</sup>

The activities around the REFER-net, supported by the Federal Ministry, have given new impetus for steps towards improved cooperation and coordination in the sector of VET research. However, a more stable basis for VET research has not been established so far, and VET research has not taken ground in the university sector on a broader scale. A more comprehensive and systematic research agenda, which would include basic and applied research, could not be developed sufficiently in that flexible structure which was also strongly oriented to short term political needs.

A reflection about the problems involved in applied research given at the CEDEFOP-agora-conference about "Vocational education and training research in Europe – to what end?" (16-17th February 2004) gave an analysis of the Austrian VET research structure. A set of strengths and weaknesses of that type of system was given.

As strengths of that system the following were identified:

(1) High "usability" of research - not an "ivory tower": there is a strong potential relation of VET research to policy making (as a mechanism of "turning results into practice"), and a strong potential relation of LM-research to practice because of the high involvement of the public employment service (AMS)

(2) High share of commissioned research related to practical issues: this brings potential "costefficiency", however, might also result in short term orientation of research, and targeting of results to certain sectors or interest groups (3) High density of relationships among "insiders": in a strong network the actors know each other and know what to expect from each other that often might prevent unproductive endless discussions, but also might lead to exclusion of certain questions

On the other hand, there are some weaknesses, which are to some extent the other side of the coin:

(1) Lack of basic research and weak international linkages: commissioned research in the market of many rather weak players might lead to a low level of resources for basic research and the set up of international linkages. A low level of innovation might result

(2) Little usage of research in political-practical decisions: research might be too closely linked to the political process so that low expectations in "informative" results arise. In the research community a lack of foresight and a lack of time develops, and in the user community a weak "absorption-potential" might emerge

(3) Practioners in education and training institutions not involved in research: the practitioners lack resources for commissioning research, and are therefore more or less excluded from the network

(4) "Lock-in": cleavages to outsiders might be the result of a tight network in the research community.

If we ask about the relationship between the VET system and the Austrian innovation system, we can start with the Austrian "performance paradox": there has been good economic performance in the recent decades, but many indicators point to a weak innovation system. Innovation is mainly imported and incremental, there is a low level of "radical" innovation. If this is the overall pattern, why should innovation in VET be different? It can be expected that the overall innovation system is reinforced by the VET system, and in fact we have a low level of basic research and internationalisation.

Two basic dynamics can be identified in the VET research system:

## Dynamics I: internationalisation

There have been big improvements on the international and European levels (Indicators, various comparative analyses, VET-research report, various networks, etc.), however, the national "capitalisation" of those international improvements does not work automatically. "Absorption capacity" is needed (in terms of involvement, content, resources, and time). Policy learning as a new concept would imply "internalisation" of policy research into VET research.

## Dynamics II: commodification

The institutional framework for VET research has evolved towards market like structures – attempts for the creation of a comprehensive R&D-institute in VET has failed in the past. Many new small institutes have been created - their main activities are in LM-research/evaluation, not in VET research. Overall too little resources are invested very unevenly, some fields are developed very well (e.g., short term micro-prognoses of the labour market), however, many projects are under financed, due to fierce competition, low expectations, and high data generation costs. As a consequence the danger of a

"privatisation" of data, and also a rising cleavage between academic research and applied research might arise.

Some outcomes and pitfalls in the system might be summarized:

There is much knowledge about Austria coming from international/European sources, often without contributions from "native" research. However, there is also a low recognition of this knowledge within the native research community. Second there are knowledge gaps in several important issues, e.g., concerning the empirical basis for lifelong learning policy. Third under resourced projects and existing "dumping" traps lead to low expectations in research - leaving questions open does not lead to further research. Finally, European support does not compensate for the existing gaps.

#### Topics of VET research in Austria

The research report 2002 has given some first indications about the state of Austrian VET research due to the 2001 documentation of educational research<sup>iv</sup> The following research topics of major attention were identified in 2001.

- costs of training
- vocational needs
- vocational integration
- higher education graduates
- institutional or multi-plant training ("überbetriebliche Ausbildung")

An additional exploration of the 2002 documentation of educational research<sup>v</sup> has shown that only a very low proportion of topics has been continuously researched in the period 2001-2003. About 10% of descriptors (absolute: about 100) were identified as related to VET research, among them only 13 were covered continuously by research projects (see ANNEX Figure). Those are the following, ranked by their incidence:

- Curriculum development
- Education and training policy
- Occupational demand
- Information technology
- New technology
- Occupational integration
- Satisfaction in work
- VET school
- Higher education graduates
- Lifelong learning
- Technological change
- Occupational guidance
- Economics of education

Some of those topics are rather broad (e.g., education and training policy, lifelong learning) some are redundant (e.g., three topics referring to new technology). In any case, the observation points to a low continuity of VET research.

Some areas of research have been covered more deeply by specific initiatives. Especially the identification of qualification needs has been developed as a topic of particular interest by the AMS. As steps towards the set up of the AMS research network workshops and conferences have been organised since 2001 about the topic of future qualification needs ("*Qualifikationsbedarf der Zukunft*"). At those workshops the main projects about that topic are discussed among the researchers, and at the broader conferences the Austrian situation is also discussed in the context of good practice at the European level. The contributions to the workshops and conferences are published by the AMS on paper and in the internet. <sup>vi</sup> Specific focus is given to methodological issues of the analysis of the demand for qualifications.

To improve the availability of results of the monitoring and analysis to a broader public an internet platform has been developed which gives systematic access to the various available sources of information: the *Qualifikationsbarometer*.<sup>vii</sup> This electronic Information base gives easy access to information about employment in the various occupational fields (starting with 25 fields), the employment and qualification structure within those occupational fields due to a high number of specialised occupations, and it links information about the employment situation and demand to information about job descriptions, necessary qualifications and competences, etc.

The VET branch of the ministry of education, science and culture has also commissioned a comprehensive research project about the system of anticipation of the demand for qualifications.

#### III. Publications 2003

The analysis of the publications can give some additional perspectives on the field. About 100 publications have been reported for 2003.<sup>viii</sup> The following figure provides an overview about the research topics of the publications grouped by the ERO descriptors. Those descriptors are different from those used for the analysis of the documentation of educational research, and they are more general.

First we can see the big emphasis on the issues of the labour market, which reinforces the above cited analysis of the basic structure of VET research. On the other hand we can see that the topics of human resource development and of teachers/trainers/professionals are not covered by publications at all, other target groups and curriculum issues are also covered rather weakly. Institutional issues, higher education, and information technology are also important topics due to this analysis.

There are some differences to the topics covered in the educational research documentation from 2002. This might indicate the instability of research topics in time, and it might also indicate that the different sources do not cover the research completely.

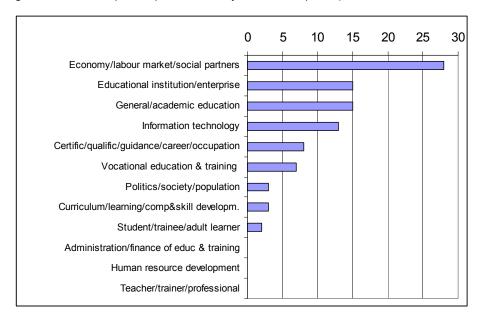


Figure: Research topics of publications by ERO descriptors (Identified from title, ordered by frequency)

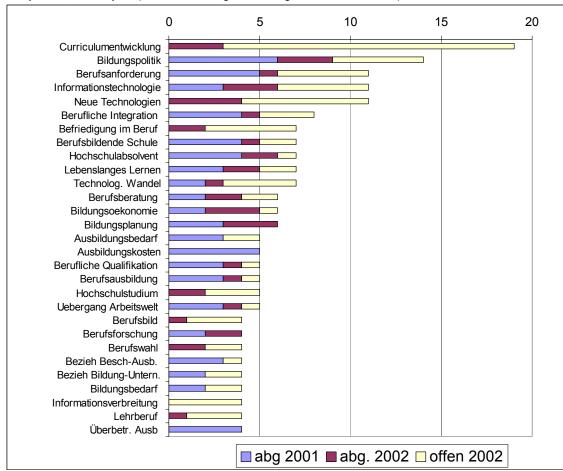
### **Results and conclusions**

VET research is a research field which is performed mainly in a (growing) market for applied research services, and which is institutionalised on a very low level in Austria. Many of the institutes providing research in this field are small and young. There are strong links to labour market research and to the public employment service (AMS), and there are weak links to academic research and to the higher education system.

Exchange among the researchers is improving, but rather weak so far. The documentation of projects and results covers the field only to some part, and seems to be fairly influenced by "self selection" of researchers and institutions that are reporting their work to the information bases.

A broad range of topics, including the areas of high priority in policy and practice, is covered by the research activities. More systematic attempts are made in labour market research, as compared to VET research in a more specific sense.

The coordinating activities set up in the course of the REFER-net at national level have led to promising step towards the further development of VET research in Austria. Given the actual state, some resources should be devoted specifically to a more systematic screening of the reporting practices and to the analysis of the state of the art in VET research at the national level. This cannot be done at the level of resources available at present.



ANNEX: Figure Research topics 2001 – 2003, research fields with projects in 2001, 2002 completed, 2002 open (Source: Bildungsforschung in Österreich 2002)

## Endnotes

<sup>ii</sup> The institutes or departments providing the study programmes for Business Education (Wirtschaftspädagogik) at four major universities (Graz: <u>http://www.kfunigraz.ac.at/wipwww/;</u> Innsbruck:

http://www.uibk.ac.at/c/c4/23/lehre/index.html; Linz: http://wipaed.jku.at/inhalt.htm; Vienna: http://www.wuwien.ac.at/inst/wipaed/) are most closely related to issues of VET research, however, those units are highly specialised to their main mission in the school sector.

<sup>&</sup>lt;sup>i</sup> The report gives the status quo in March 2004.

See: http://www.ams.or.at/b info/index400fn.htm

V See: http://www.rpi.at/Bildungsforschung-Dokumentation-2001.pdf

<sup>&</sup>lt;sup>v</sup> See: http://www.bmbwk.gv.at/medienpool/11420/bifodok 02.pdf

<sup>&</sup>lt;sup>vi</sup> See: http://bis.ams.or.at/forschungsnetzwerk/

vii See: http://www.ams.or.at/b\_info/index400qb.htm

viii See: http://www.abf-austria.at/docs/abf%20InfoDoc%203-2004.pdf