

VET-research in Austria – short description

Contribution to REFER-net (September 2003)ⁱ

Changes of the basic structure of educational R&D and VET research in Austria

A report for the OECD project about educational R&D has analysed the situation of VET research in the 1990 as a part of educational R&D.ⁱⁱ It turned out that educational R&D was in a weak position in general. Three different sectors were distinguished in educational research:

- general and school related research,
- higher education research, and
- VET research.

Those sectors were organised very differently. The first sector was based in the university system, and to some extent in the institutions for teacher education, the second sector was very weakly developed and situated in a few highly specialised units of non-university or university research plants, and VET research was mainly organised in a market like fashion. Institutions related to the social partners had a remarkable share in that market.

Important characteristics of VET-research were that it was only marginally based in the university system,ⁱⁱⁱ and therefore mainly focused at applied research questions. The main financial sources were invested from the labour market authorities, and therefore VET research was closely related to issues of the labour market development, occupations, and educational choice and orientation. Thus there was no clear separation between VET research, research about occupational development and labour market research. The institutions taking part in the market were very much driven by competition and some attempts made to establish more coordination and cooperation in that research area have failed. 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.

During the last decade some principal traits of that basic structure have persisted, however, some important aspects have changed.

- First in the sector of *general and school related research* steps have been taken towards more cooperation (by the set up of a scientific society and a journal)^{iv}, a strong focus has arisen particularly in the field of school development and quality assurance (supported by activities of the school administration).^v At the moment, the institutions for teacher training are in a process of reform, and are expected to develop stronger competencies in educational research.
- Second, in the sector of *higher education* research the foundation of the new polytechnics (Fachhochschule) has given impetus to research in several ways (the implementation process was accompanied by a OECD-review and monitored by a policy research project; the analysis of

qualification needs was set up as a necessary condition for the accreditation of new study programmes in the polytechnic sector, and the administration is running a research programme^{vi} etc.)

- Third, in the sector of *VET research* 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”,^{vii} and AMS has also taken steps for the improvement of communication (by the set up of a research platform)^{viii}

The most recent 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.

Overview about recent topics of VET research in Austria

An important task of the Austrian network is the improvement of communication, exchange and cooperation among the actors in Austrian VET research. To develop the knowledge base about the state of VET research and the main research topics in this field is a key issue. A screening of the available documentary sources shows that much is to be done in this area. At present the information channels cover the scenery only to a certain degree. Thus, we can give some first indications about the state of Austrian VET research only.

I. VET research in the 2001 documentation of educational research^{ix}

The documentation of educational research does not indicate VET research as a particular category. In a first step the coverage of VET research by the documentation can be explored, if we compare the institutions represented in the educational research documentation with the institutions in the AMS research network: from the 38 institutions of the AMS network only 6 (that is 16%) are represented in the educational research documentation.

In a second step we can search that information base for descriptors which are typical for VET research (e.g., occupation, work, technology, qualification, training, labour force, graduates, school to work transition, apprenticeship, modular training; see ANNEX) we get between a minimum of about 40 projects^x to a maximum between 120 and 160 projects^{xi} performed (completed or ongoing) during 2001. About 20% of performed projects were *ongoing* and 80% *completed* during this year. That distribution points to a rather short duration of many projects.

Research topics of major attention in 2001 can be indicated by descriptors which have been given to more than one project.^{xii} If we leave some broad and general descriptors (educational policy, continuing vocational education, VET school) aside, we get some focus on the following aspects:

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

II. Specific initiatives: Future demand for qualifications

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.^{xiii} 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*.^{xiv} 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.

III. Publications 2002-03

The analysis of the publications can give some additional perspectives on the field. About 150 publications have been reported for 2002-03 (including also some from 2000-02; from 2002 a number of 113 publications is included). The publications in many cases are reporting results of research projects, however in a number of cases separate reports prepared inside the administration and information material for a broader public are included in the list. Thus the educational research documentation and the reported publications cover the same “population” only to some extent: to get a valid picture of the scenery the results must be added to some extent.

The reporting of the publications is done by different types of institutions (which are included in the broader Austrian VET network), particularly those who have mainly commissioned research and published the results (AMS, BMBWK, AK, WKO are the most important ones) and the research institutions. To some extent the commissioning institutions also perform research and monitoring by themselves (the AMS research branch). Compared to the educational research documentation a

somewhat higher number of the research institutions of the AMS research network is represented in that publication base: 10 institutes are represented explicitly and some 5-10 additional institutes are represented indirectly via the reporting by the commissioning institutions. If we take the 38 institutions of the AMS network as the basic population, no more than half of them are covered by the publications information base.

About one third of the publications have been commissioned by the AMS. Those publications give results particularly in three main fields:

- Monitoring of the short and medium term labour market development, including qualification needs^{xv}
- Evaluation of labour market policy measures^{xvi}
- Information material for occupational and education/training choice.^{xvii}

Some of those AMS-publications are parts of longer term projects which are performed regularly or periodically, within the research branch of the AMS or in close collaboration between the researchers and the AMS. Those regular publications include the analysis of the labour market by education, the stocks and flows on the labour market, the short-term prognosis of the labour market development, the micro analysis of labour supply, the short- and medium-term prognosis of supply and demand in the apprenticeship system, etc.

Other topics of broader weight are analyses of demand for polytechnic programmes (7 publications), various reports about education in Austria provided by the BMBWK (13 publications), studies about the development and status of adult education (5 publications).

Special research topics covered by individual publications or a small number of publications are - among others - the following:

- IT and e-learning
- gender issues
- new learning environments
- quality assurance
- entrepreneurship
- information society
- lifelong learning
- opportunities for disabled people
- mobility and networking
- new forms of working contracts
- drop out and early school leavers
- cooperation with Middle- and East-European countries
- language learning.

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.

Endnotes

ⁱ The author has to thank Jörg Markowitsch for valuable comments.

ⁱⁱ Educational Research in Austria. In: Educational Research and Development. Austria, Germany, Switzerland. OECD Documents. Paris 1995, p.31-37.

ⁱⁱⁱ The institutes or departments providing the study programmes for Business Education (Wirtschaftspädagogik) at four major universities (Graz: <http://www.kfunigraz.ac.at/wipwww/>; Innsbruck: <http://www.uibk.ac.at/c/c4/c433/lehre/index.html>; Linz: <http://wipaed.jku.at/inhalt.htm>; Vienna: <http://www.wu-wien.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.

^{iv} See: <http://paedpsych.jk.uni-linz.ac.at/INTERNET/OEFEB/FAQs.html> and <http://www.studienverlag.at/titel.php3?nr=149>.

^v See: <http://www.gis.at/start.htm>

^{vi} See: http://www.fhr.ac.at/4_publ/4_2.htm

^{vii} See: <http://www.studienverlag.at/suche.php3>

^{viii} See: http://www.ams.or.at/b_info/index400fn.htm

^{ix} See: <http://www.rpi.at/Bildungsforschung-Dokumentation-2001.pdf>

^x Projects selected by combinations with the descriptor occupation (= "...beruf...") in title or abstract.

^{xi} Projects selected by a broader group of VET-related descriptors in title or abstract; the range between 100 and 165 is given because the projects are described by more than one descriptor: the overall number of projects carrying one or more of the VET-related descriptors is 241 (193 completed and 48 ongoing projects) – if projects on average carry two descriptors the number is about 120, if the average factor is 1.5, the number is about 160.

^{xii} In sum about 100 descriptors were selected as VET related; half of those descriptors are attached to only 1 project; only about 20 of the about 100 descriptors (less than one quarter) are attached two three or more projects; the maximum of projects per descriptor is 8 for the broad category „Bildungspolitik“ (educational policy); about 25 descriptors (one quarter) are attached two 2 projects (see the list in the ANNEX).

^{xiii} See: Conference „Qualifikationsbedarf der Zukunft I“ May 2002

(<http://bis.ams.or.at/forschungsnetzwerk/dokumentationQBZ.pdf>); see also: Maria Hofstätter, René Sturm (Hg.): AMS report 34 – Qualifikationsbedarf der Zukunft I : Früherkennung und Darstellung von Qualifikationsbedarf. Beiträge zur Fachtagung "Qualifikationsbedarf der Zukunft - Prognoseinstrumente und Innovationsfelder" des AMS vom 28. Mai 2002 in Wien; „Qualifikationsbedarf der Zukunft II“ October 2002 (http://www.ibw.at/html/projekte/proj_nat/ams/aktuell_fs.htm).

^{xiv} See: http://www.ams.or.at/b_info/index400qb.htm

^{xv} See: Projections of qualifications and occupations in Austria: Short-term approaches, macro perspective and emphasis on the supply side. In: M. Neugart, K. Schömann (eds.) Forecasting labour markets in OECD countries. Measuring and tackling mismatches. Cheltenham: Elgar 2002, 240-282.

^{xvi} See the documentation of short information, reports, and studies: http://www.ams.or.at/b_info/index400.htm.

^{xvii} See as a summary the Qualifikationsbarometer, which includes most references to information material: http://www.ams.or.at/b_info/index400qb.htm

ANNEX: Descriptors used for identification of projects in VET-research

Completed Projects 2001

DESCRIPTORS	No of projects	Project Number
Bildungspolitik	6	2192, 2196, 2206, 2238, 2266, 2277
Ausbildungskosten	5	2203, 2220, 2225, 2226, 2234
Berufsanforderung ^{xviii}	5	2201, 2220, 2230, 2238, 2293
Berufliche Integration	4	2188, 2241, 2264, 2288
Berufsbildende Schule	4	2199, 2238, 2245, 2287
Hochschulabsolvent	4	2204, 2216, 2268, 2293
Überbetriebliche Ausbildung	4	2200, 2203, 2206, 2234
Akademikerarbeitslosigkeit	3	2216, 2223, 2293
Ausbildungsangebot	3	2199, 2238, 2241
Ausbildungsart	3	2203, 2236, 2239
Ausbildungsbedarf	3	2199, 2234, 2238,
Berufliche Qualifikation	3	2203, 2245, 2261
Berufsausbildung	3	2201, 2224, 2230
Beziehung Beschäftigung - Ausbildung	3	2206, 2288, 2293
Bildungsplanung	3	2223, 2240, 2268
Computeranwendung ^{xviii}	3	2199, 2204, 2277
Duale Ausbildung	3	2236, 2239, 2240
Erwachsenenbildung	3	2225, 2226, 2234
Informationstechnologie	3	2199, 2201, 2277
Lebenslanges Lernen	3	2203, 2205, 2234
Sozialpartner	3	2206, 2234, 2235
Übergang zur Arbeitswelt	3	2206, 2188, 2288
Weiterbildung der Mitarbeiter	3	2203, 2261, 2209
Akademikerbedarf	2	2223, 2293
Anfangsausbildung	2	2236, 2239
Arbeitskräftemangel	2	2204, 2223
Berufliche Rehabilitation	2	2188, 2288
Berufliches Streben	2	2203, 2221
Berufsbegleitende Ausbildung	2	2220, 2234
Berufsberatung	2	2228, 2241
Berufsforschung	2	2223, 2230
Berufsklassifizierung	2	2230, 2240
Berufstätige Mutter	2	2247, 2249
Beschäftigung Jugendlicher	2	2224, 2240
Beziehung Hochschule - Unternehmen	2	2279, 2293
Bildungsbedarf	2	2223, 2278
Bildungsökonomie	2	2196, 2226
Computernetzwerk	2	2277, 2278
Frauenbeschäftigung	2	2221, 2224
Ingenieur	2	2200, 2201
Jugendarbeitslosigkeit	2	2224, 2288
Praktikum	2	2200, 2264
Qualifikationsgrad	2	2238, 2241
Techniker	2	2200, 2201
Technische Bildung	2	2220, 2201
Technologischer Wandel	2	2201, 2205
Umschulung	2	2230, 2234
Wirtschaftliche Ressourcen	2	2225, 2226
Wirtschaftsentwicklung	2	2238, 2245
Akademischer Grad		2268
Aktionsprogramm der EG		2222
Arbeitnehmer		2225
Arbeitsbeziehungen		2234
Arbeitskräftebedarf		2204
Arbeitsmarkt		2228
Arbeitsplatzsuche		2188
Aufteilung der Arbeitszeit		2220
Ausbildung der Ausbilder		2199
Ausbildungs- und Arbeitsplatzgarantie		2240
Ausbildungswahl		2241
Ausbildungszentrum		2200
Befriedigung im Beruf		2288
Berufliche Information		2241
Berufliche Mobilität		2230
Beruflicher Misserfolg		2224
Berufsbild		2228
Berufsbildung		2264
Berufschance		2224
Berufserfahrung		2264

Cont. DESCRIPTORS	No of projects	Project Number
Berufslaufbahn		2224
Berufsprognose		2238
Berufsverband		2216
Betriebspraktikum		2200
Bildungsnachfrage		2240
Computer literacy		2199
Curriculumentwicklung		2245
Demographie		2240
Erwerbsleben		2224
Freier Verkehr von Person, Waren, Kapital		2228
Handfertigkeit		2264
Informationstext		2278
Informationsverarbeitung		2201
Informationsverbreitung		2259
Innovation		2217
Jugendlicher		2266
Jugendpolitik		2288
Junger Erwachsener		2224
Lehre		2240
Lehrling		2240
Modular Training		2287
Polytechnische Bildung		2200
Praktikant		2200
Qualifikation		2201
Schulwahl		2285
Sozioprofessionelle Kategorie		2230
Technisches Personal		2201
Technologische Bildung		2200
Telekommunikation		2204
Unqualifizierte Jugendliche		2224
Werkstatt		2264
Werkstudent		2220
Wirtschaftsbedingungen		2230
Wirtschaftswissenschaft		2204
Zweiter Bildungsweg		2235

Ongoing Projects 2001

Bildungspolitik	8	2195, 2219, 2229, 2253, 2267, 2274, 2281, 2294
Curriculumentwicklung	3	2244, 2248, 2251
Berufsanforderung	2	2224, 2251
Berufsanforderung	2	2294, 2295
Beschäftigung Jugendlicher	2	2187, 2218
Bildungsbedarf	2	2219, 2229
Erwachsenenbildung	2	2232, 2233
Tourismus	2	2208, 2244
Anerkennung von Bildungsabschlüssen		2297
Arbeitsmarktpolitik		2187
Ausbildungsprogramm		2202
Ausbildungszentrum		2202
Befriedigung im Beruf		2213
Berufliche Integration		2187
Berufswahl		2218
Betriebsgründung		2202
Betriebsmanagement		2202
Computeranwendung		2276
Computernetzwerk		2276
Credits		2297
Handarbeit		2282
Handfertigkeit		2282
Hochschulabsolvent		2295
Informationstechnologie		2276
Klein- und Mittelbetriebe		2202
Lehrberuf		2213
Managementausbildung		2202
Orientierungsstufe		2292
Technische Bildung		2282
Übergang zur Arbeitswelt		2187
Werkstatt		2282
Wirtschaftskunde		2202
Zweiter Bildungsweg		2232