Institut für Höhere Studien (IHS), Wien
Institute for Advanced Studies, Vienna

Projektbericht / Research Report **January 2000**

Professionals for Vocational Education and Training in Austria - Report for the EUROPROF-Project

Lorenz Lassnigg, Eduard Stöger

Professionals for Vocational Education and Training in Austria - Report for the EUROPROF-Project

Lorenz Lassnigg, Eduard Stöger

Final Report

This report has been produced as part of the European Commission Leonardo da Vinci Surveys and Analyses Project "New Forms of Education of Professionals for Vocational Education and Training (EUROPROF)"

January 2000

Institut für Höhere Studien
Stumpergasse 56, A -1060 Wien
Fax: +43/1/599 91-191

Lorenz Lassnigg
Phone: +43/1/599 91-214
E-mail: lassnigg@ihs.ac.at

Eduard Stöger
Phone: +43/1/599 91-136
E-mail: stoeger@ihs.ac.at

Institut für Höhere Studien (IHS), Wien
Institute for Advanced Studies, Vienna

Contents

A. Background 1

1. Fields of action within Vocational Education and Training 1
2. VET-professionals 19

B. Research Design 20

1. Materials and analyses describing VET-professonals 21
2. Expert interviews 22
3. Surveys 23

C. Results 24

1. VET-professionals in different fields of action 24
2. Training pathways for VET-professionals 25
3. Examples of VET-programs 35

D. Interpretative description of the interview material 49

1. Research questions 49
2. Shortcomings and issues for reform in the VET-system 49

E. Summary of the professionalism of VET 54

Roles of VET-professsionals 54

The role of research 59

F. Evaluation of the bases of the Europrof-project by means of the expert interviews 63

G. Conclusions, comments and recommendations 65

Literature 66

Annex (Interview-Documents) 69

Tables and Figures

Table 1: Rough numbers of VET teachers (head counts) 27
Table 2: Participation and events in the organizations of vocational education and training (WIFI and BFI) 34
Table 3: Long-term Participation in VET-Programmes (N x 1,000) 37
Table 4: Hours of instruction in different educational pathways 38
Table 5: Some general characteristics of programmes of Austrian post-compulsory VET 39
Table 6: Number of courses available by programmes and occupational fields 40
Table 7: Categories of Austrian VET-teachers and their initial training pathways 41
Table 8: In-service training of VET-teachers in Austria 47

Figure 1: HRD Roles and self-reported job positions of German HRD-Personnel 56
Figure 2: Stylized pattern of roles and professional categories in Austrian VET 58
Figure 3: Institutional features of practice and research in Austrian vocational education 61

Institut für Höhere Studien
Institute for Advanced Studies
Stumpergasse 56
A-1060 Vienna
Austria

Phone: +43-1-599 91-216
Fax: +43-1-599 91-191

A) Background

1. Fields of action within Vocational Education and Training

The System of Initial VET

Austria has a strong system of vocational education and training at the upper secondary level. About 60 per cent of the population aged 25-64 own a certificate at that level, and the proportion of VET-institutions among upper secondary level students is about 75 per cent of an age cohort.[1] The Austrian VET system has at the upper secondary level both a strong apprenticeship sector *and* a strong system of vocational and technical schooling as well. The formal certification system is almost universal, with most of the credentials being tied together in a framework of exchange relationships. The institutional structure has a resemblance to the bureaucratic model. Especially the schooling sector, is highly formalised, with a strong stance towards regulations at the central level. However, the most important building elements of the system are long and highly formalised "study lines" leading to rather specific vocational categories. The programmes constituting the study lines are based on centrally amended curricula ("*Lehrpläne*"), which are based on federal law (full-time schools) or combined federal and regional "*Länder*" law (part-time school supporting apprenticeship); in addition the occupations for apprenticeship are centrally regulated by decree of the Ministry of Economic Affairs.

This basic structure imposes some significant consequences on policy, as well as on the behaviour of actors within the system. There are numerous study lines located in various institutions, and the formalised regulatory system constitutes a very complex array of regulations difficult to oversee.[2] Policy action is constrained by the logic of the internal systematic structure of the specific highly-formalized courses of study, etc.

The institutional structure of the apprenticeship system is twofold, on the one hand the part-time school is bureaucratically organised, and on the other hand there is a broad market element concerning the enterprise part of the system. However, the central elements of apprenticeship are also highly formalised, with emphasis on work sites as well as on the

---

[1] Lassnigg, L. & W.Pollan (1996) Das österreichische Qualifizierungssystem im internationalen Vergleich. Ein Überblick. WIFO-Monatsberichte (No.12), 763-780.

[2] There are some 350 courses offered, according to different occupational categories within the Austrian VET-system at the level of upper secondary education. Thus the system is highly specialized. If we consider the whole system, the tertiary level included, there are at least 600 different courses, each of them regulated by detailed legal based curricula (Lehrpläne). Broken down by subjects (about 15 per course) whose content is specified for each grade of the courses, we find a very complex system of regulations. On the whole the regulations which indicate the content of the curricula may be estimated on a scale of at least a quarter of a million items, a complexity where oversight is impossible.

employers' side of the partnership. Within the formal framework, the enterprises have broad discretion over the training processes.

Higher education is dominated by universities, the non-university sector being composed mainly of teacher training institutions (especially for primary and lower secondary school teachers), as well as of some other small semi-professional institutions in the fields of social work and health. The university system is shaped by the classic bureaucratic co-ordination mode at the system level. The system is a highly centralised and uniform state system, and the volume and complexity of legal regulations are also very high. Discretionary power at the institutional level is low, and severe problems are observed concerning management and organisational structures. At the bottom level of teaching and research units, great power is concentrated -- especially in the hands of the highest-ranking among the university staff, e.g. full professors.

An important innovation of the basic structure of the system is currently under way, the law constituting the development of new non-university higher education-institutions called *Fachhochschulen*, was amended by Parliament in 1993. *The Fachhochschulen* are designed to fill a gap between vocational education and universities. These are also bringing a new regulatory framework into the Austrian education system: one driven by the option of institutional flexibility, accountability, and professional autonomy. We will discuss some features of the new system later in this paper. [3]

This sketchy overview shows us that a classic bureaucratic system (schools, and -- somewhat less tightly -- universities) are coexisting besides a more loosely regulated market (enterprise part of apprenticeship and further education). Tensions between these two sectors, partly reflecting the positions hold by employers' vs. employees' organisations, are strongly influencing the policy discourse. From the point of view of actors in this system, there are three more or less distinct "worlds" existing side by side, which reflect the institutional structure:

⇒ The individual teachers and trainers, who act within the structure of regulations;

⇒ the political and societal forces from "outside", who take the overall regulatory decisions (political parties, social partners, teachers' and parents' organisations, etc.);

⇒ and the administrators who act between these two groups, bringing the regulations "into life".

[3] See BMWF & BMUK (1992), Diversification of Higher Education in Austria. Background Report submitted to the OECD, Vienna.

About 19,000 teachers are attached to about 1,000 full-time vocational or technical schools, and further 5,000 teachers to more than 200 part-time vocational schools; About 60,000 enterprises are accredited to perform apprenticeship training, about 45,000 actually have enrolled apprentices -- compared to the sum of 1050 full-time vocational and technical schools this is a high number.). The apprenticeship system is very much decentralized, and enterprise training is performed mainly on the job, supervised by employees besides their productive work; we may roughly estimate that explicit training activities consume on average about 200 hours per year (4 hours weekly) per apprentice, which is about 10 per cent of one employee. In addition about 5 per cent of the training enterprises (2.300 enterprises) have employed full-time trainers. In sum there may be 15,000 to 20,000 full-time equivalents of trainers in the enterprises, which is roughly equivalent to the number of teachers in full-time vocational and technical schools (19,000), but is very much dispersed across the high number of enterprises. In total, more than 50,000 persons are actually involved in apprenticeship (every training enterprise must have at least one person who is responsible for training). About 10 per cent of training enterprises do have extra infrastructure for apprenticeship (work shops or some extra facilities), 90 per cent are integrating their apprentices totally into the normal working process. However, most of the part-time trainers in the enterprises do not even perceive themselves as trainers, and the training requirements for that category is very low, and frequently challenged in the policy process to be abandoned at all.

The individual schools do not have a strong position as acting units. This kind of centralised and highly regulated system, including a broad market-co-ordinated segment, produces a strong bias towards top-down processes, and policy questions are mainly about features of the institutional structure. The recent debates in Austria about change and innovation are very much concerned with *deregulation and autonomy of schools*. The individual schools shall get more discretion in many fields, as, e.g. curriculum design, financing, personal policy, and the like. Teacher education and further training are strongly related to this.

Concerning the role and impact of *bottom-up processes* in the system, we can state that these are widely neglected by the policy process. However, the question remains whether the neglect reflects either that there are no bottom-up processes going on in the system, or that they are going on, but in a more hidden and invisible manner. This point will be discussed more deeply under the heading of change and innovation in Austrian VET.

Further Education and Human Resource Development (HRD)

In general there is no similar organized and regulated public system of further education in Austria. Funds for further education are mostly private, and accordingly the education and training activities are also provided by private organizations which are frequently non-profit organizations. Especially two smaller components of further education are publicly organized: institutions of second chance education as a part of the institutions administrated by the

ministry of education, and labor market training which is part of the public employment service. A third component is a broad market of training.

In a recent policy statement by one of the most well known Austrian researchers about adult education and holder of a university chair for this field the situation is summarized as follows:[4]

- Sharp separation of general and vocational adult education
- affiliation of the adult education institutions to religious, political, and interest groups ("*weltanschaulichen Lagern*")
- low degree of professionalization
- scarce co-operation of institutions, but rather high competition among them
- lack of a common system of adult education (lack of organization and co-ordination, presence of segmentation)
- lack of market transparency for the customers[5]
- the public activities concerning adult education are not co-ordinated, the three involved federal departments are acting without co-ordination.

Overall participation in vocational further education and training is between 10 per cent (minimum estimate) and one third (maximum estimate) of the labor force a year. A general characteristic of further education is that it does very scarcely provide basic education. Therefore people who have little initial education do participate to a much smaller extent in further education than do people who have better initial education. In addition, there are only very few programmes which give remedial basic education for adults. On the other hand, the proportion of adults who lack a sufficient basis of initial education, i.e. who are functionally illiterate, is unknown in Austria. However, about 30 per cent of the 25-65-aged population have less than upper secondary education, we may estimate that at least 5 to 10 percent have a rather poor educational basis. Another component of further education is in-service and career education and training, especially within the public administration on the one hand, and within the craft sector as the master craftsmen education and training following apprenticeship and frequently necessary as a requirement for setting up an enterprise. HRD activities, although they have broader objectives, are closely linked to further education.

- **Second chance further education** Additional courses are offered to graduates of the apprenticeship system and full-time vocational schools in order to acquire higher-level qualifications. These courses are part of the so-called *second-chance education.* The programmes within the *second-chance education* block provide-- up-grading courses which

[4] Lenz, W. (1997), Positionspapier zur österreichischen Erwachsenenbildung. Contribution to the high level group at the Federal Ministry of Education and Cultural Affairs: "Megatrends" in Demografie und Arbeitswelt. Vienna (manuscript).

[5] An information system is under development since 1993, and has been implemented so far in four of the nine Länder; see Kanelutti, E. (1996), Bildungsberatung, -information und -datenbanken in Österreich. In: BMUK (Ed.), Statements zur Enquete "Neue Wege in der beruflichen Aus- und Weiterbildung". Vienna (mimeo.)

offer the same type of certification as upper secondary schools for employees; and-- a variety of courses which introduce work-oriented knowledge and skills to beginners or which enhance or up-grade the knowledge and skills of graduates from VOTEC institutions. This system has expanded during the last decades, however remained rather small compared to the initial education system. Overall participation in this system is about 20,000 students, half of them employed (the range of this system equals grossly ten per cent of initial full-time schooling at the upper secondary level).

- **Labour market training** Labor Market training is funded by money from the unemployment insurance, and provides mostly short qualification courses which are demanded from the labour market, partly on the job training in enterprises is subsidized also. Participants are mostly unemployed, and get the means for training as well as a compensation for their living expenses. About 55,000 participants are financed per year (10,000 in enterprise training), 40,000 of them for their living expenses also (compared to 160,000 pupils in full-time vocational schools and 140,000 apprentices). The overall expenses for labor market training are small compared to other countries (about US$ 300 million, compensation for living expenses included), expenses per participant are similar to the average expenses per student in primary and secondary education. The public employment service owns some training institutions, however, the most part of training is provided by the adult education and training institutions operating on the market.

- **The further education and training market** Further education is organized on a mainly private basis and coordinated by the market mechanism. According to recent statistics the overall participation is about 4.9 M. taking part in about 150,000 further education events. The number of participants is unknown because only cases of participation are recorded, many of the participants are taking part more than once. Moreover, about 3.3 M. participations are very short, lasting 1-4 hours only, and including single lectures also. A loose network of the ten main organizations which organize these events of adult education, called KEBÖ, collects some information about adult education and training. The personnel employed by this network is 3,800 employees plus 67,500 persons who are participating on a part-time basis in this work (38,700 of which are salaried, and 28,800 who are freemen). However, the reported participation includes a wide range of different activities, which are only partly vocational education and training. Because we lack information about the subjects of the reported activities, it is not easy to identify sufficiently the share of vocational education and training in the market. There are also some more institutions providing vocational training which are not members of KEBÖ, e.g. private groups of trainers, or management institutes. Nevertheless we can give some estimates of the magnitude of the market for the industrial and service sector (There is an organization run in the field of agriculture, which shows up high numbers of participation, but which are omitted here). The whole number of participation cases in this market can be estimated about 550,000 a year (all other above categories of further education and training - second chance

education, labor market training, in-service and carreer education and training -- not included) About two thirds of this market is represented by the training institutions run by the social partners. As an example, we may provide some information about the funding of WIFI, the training institute of the employers' organization: one third is financed by subsidies from the chambers of commerce, and two thirds financed by contributions of clients. Half of contributions of clients come from employers, and half come from employees.

- **In-service and carreer education and training** Among organizers and providers of further training programmes, industry plays the by far biggest role. Most events are organized and carried out by the companies themselves, customer training courses, courses provided by producers, and courses held at other companies are also important strands of further education. In-service education is important especially in the public administration which own special institutions and require further education for all civil servants, and in the education system which also owns an institution for further education of teachers in each region. Further training of civil servants is estimated at least 15 per cent a year, teachers participate on average 3 days a year in further education. Another important institution is the training of master craftsmen, which includes education and training for taking over responsibility for the apprenticeship training in an enterprise. Especially in small and medium enterprises a high share of the owners of firms have finished kind of training. In some branches of the economy, especially in banks and insurances, in-service further training of adults is frequently occurring. In sum, participation in in-service training is estimated to be 20 to 25 per cent of all vocational further education and training, or up to 6 per cent of total employment. However, it should be noted that these estimates are rather roough, and represent only possible orders of magnitude.

- **Human resource development (HRD) and other innovative activities** HRD may be seen as *"a new occupation seeking professional status"*(Odenthal/Nijhof 1996, 7)[6], and is by some authors described as an activity which grows out from initial or further vocational education activities in the enterprise, and finally integrates training activities and organizational development. HRD-activities are not reported, and have seldom been investigated into on a systematic basis so far in Austria. Of course there are enterprises in Austria which are involved in HRD, however there is no information about the incidence. A study from the early nineties about enterprises which were judged by their "peers" as pioneering in human resource management has found only large enterprises which employed more than 1,000 employees performing in this field. Further impressions were that the field was very much in flux, and in many enterprises more or less separated from the core functions; the managers in the field were described as more or less isolated from each other, showing a low degree of networking across the boundaries of firms

[6] Odenthal, L. & W.J.Nijhof (1996) HRD Roles in Germany. Studies in Human Resource Development. DeLier: Academisch Boeken Centrum/ Universiteit Twente.

(Boos/Heitger 1993).[7] In addition, a market of consulting firms is developing, however, the firms are very small, and a lack of quality control is frequently complained about. Another line of innovative activities develops in the area of territorial development policies. Since the early nineties the establishment of "Impuls Centers" (Regional Innovation Centers, Technology Parks, Technology Transfer Centers, etc.) is an important strand of development which indirectly contributes to vocational education and training. This policy is focussing on the development of "intermediaries", and is closely attached to the activities and the support structures in the realm of policies funded under Objective 4 of the European Social Funds (ESF).[8] About 20 institutions of this kind were founded during the last decade, whose objective is the provision of material and immaterial infrastructure for innovative activities in the respective regions.[9]

Change and Innovation in the System

Going back to the basic structure of the system, we may take two different theoretical interpretations about how processes of change should go on in that kind of system. Margaret Archer (1979) in her seminal analysis of the origin and development of educational systems has distinguished between two general patterns of development, depending on the degree of centralization of a system.[10]

-- "Stop-go"-cycles in the centralized system*:*

> *"Periods of stasis are punctuated by legislative reforms and change advances by jerks rather than the slow accretion of modifications. The pattern remains the same whether it is produced through the legitimate political channels or not. In all cases universal reforms fail to satisfy; they are followed by a period in which grievances build up and finally result in another universal reform, the cycle repeating itself indefinitely.* "(Archer 1979, 628)

-- "Incrementalism" in the decentralized system*:*

> *"In the decentralized system change is a combination of small localized shifts, possibly concentrated on one level or one establishment in a given area, whose effect is cumulative, and polity directed changes, which are intended to be larger in scope. However (...) even the legislative changes which occur here do not*

---

[7] Boos, F. & B.Heitger (1993) Modernes Personalmanagement und arbeitemarktpolitische Konsequenzen. Research report. Vienna: Bundesarbeitskammer (Chamber of Labour).

[8] See the action programme concerning the improvement and development of training systems, p.72-77 in the single programming document: Europäischer Sozialfonds, Einheitliches Programmplanungsdokument Ziel 4, 1995-1999, Österreich. Vienna: BMAS (Federal Ministry of Work and Social Affairs).

[9] Cf. OECD (1995) Local Responses to Industrial Restructuring in Austria. Paris: OECD.

[10] Archer, M.S. (1979) Social origins of educational systems, London & Beverly Hills: Sage

> *dramatically transform the system. These are modified, in their very conception, by the other ongoing changes and are mediated, in their implementation, by local and institutional forces. They too bring about further increments of change rather than root and branch reforms. It is by following through the way in which the small localized shifts can accumulate to produce a significant scale of changes as well as the way in which central policy directives are systematically reduced in scope that the overall pattern of incremental change is understood. The 'incremental pattern' is the result of both action sequences, in conjunction with one another."*(Archer 1979, 671)

A very different interpretation of change gives the institutional theory of John W. Meyer and his colleagues outlined above. The crucial point is the decoupling of the core function from the broader institutional system. In this theory the well known traits of the bureaucratic educational system do not inhibit the development and innovation of the teaching-learning process -- on the contrary the strong institution serves as an umbrella for the performance in the classroom, giving space for various kinds of – somewhat "hidden" – innovation and reform. "*While it is common to decry the traditionalism of American school system, it seems more appropriate to emphasize the extraordinary rate at which innovations of various kinds are incorporated into American schools (as well as the rapid rate with which they disappear).*" (Meyer, Scott & Deal 1983, 56). Another trait of the institutional model is the high responsiveness to environmental demands. However, the basic idea of incrementalism, that the system would undergo a process of change which is based on the various small and decentralized innovations, is rejected by the institutional theory, because the overall structure has to remain stable, and moreover, is irrelevant for quality of the performance of the system.

In any case, it seems not to be easy to solve this contradiction. We can find various illustrations for both interpretations. A possible solution may be the duality of institutional change, and change of processes within the institutions. It is often mentioned that policy and research is concentrating on institutional or organizational features, however, these features are often termed as less important for the performance of the system. So both interpretations may be true, albeit for different levels of the system. The general developmental patterns may hold for the changing institutional framework, whereas the performance of the core processes within that framework may be left relatively unaffected by these changes because of the mechanism of decoupling. At the same time the process of teaching and learning may change strongly also when the framework remains stable, and this change may not even be observed because the actors involved agree about the basic normative system -- as Karl E. Weick (1976) has posed it in his famous paper about *loose coupling* by confronting his really "*uncoventional depiction*" of educational organizations which "*captures a different set of realities (...) than are*

caught when these same organizations are viewed through the tenets of bureaucratic theory".(Weick 1976, 1)[11]

If we turn to education policies in Austria, we can easily observe that the tension between the contradicting interpretations is a strong underlying theme of strategic thought. In fact, we find the duality of structure and process even in the framework of legal foundations of education policy. There is a law which constitutes organization, which means the structure of educational institutions and programmes ("*Schulorganisationsgesetz - SCHOG*"), and a law which constitutes process-related issues as student assessment, and the like ("*Schulunterrichtsgesetz - SCHUG*"). Reviewing the process of policy formation, the debate clearly concentrates on the organization issues, reinforced by the fact that the organization law can only be amended by qualified majority. The process issues, which are not easy to be captured directly by regulation are nevertheless fixed indirectly by a framework of regulations which define in painstaking detail the rights and responsibilities of the various categories of teachers ("*Lehrerdienstrecht*") – interestingly that aspects which determine in fact many parameters of the teaching-learning process, e.g. by giving weights to the various subjects and non-teaching activities, or structuring of time allocation of teachers and thus strongly influencing the actual teacher-pupil ratios, are normally not perceived as an issue of education policies. Rather these aspects are located within the processes of collective bargaining between the state authorities and the teacher unions. Given all these regulations, the teacher, when he is in his classroom to teach his subjet at the time, he has to teach the pupils who have to be there, and given the regulations about examinations and assessment of the pupils' achievement, has the freedom to design "teaching". Here is exactly the point where the decoupling occurs – and exactly at this point lies a fundamental uncertainty in the policy discussion: What does this freedom mean? Is there "in fact" room for discretion or is there not? Does the variation constituted by that freedom have an impact on the functioning and outcome of the educational process or does it not?

The principal positions in the policy discussion have for a long time been split towards competing camps, the *progressive* one answering "no", the *conservative* one answering "yes" to that question. Accordingly the progressive camp, in their struggling for reform, has concentrated on the change of organizational issues, the conservative camp has mainly emphasized the crucial role of the teachers, their activities in the classroom and their "professionality". A closer look, however, at the strategies of the competing camps concerning the teaching profession, we can see that the essential aspects, namely the parameters of trade unionist regulations, have hardly been disputed. We see a duplication of the general line of thinking: the progressive ones are concentrating on *organisational reform* of teacher education (especially upgrading all of it to full university status, which in fact is hardly realistic

[11] Weick, K.E. (1976) Educational Organizations as Loosely Coupled Systems. Administrative Science Quarterly 21 (March), 1-19.

for time foreseeable because of exactly the trade-unionist regulations), whereas the conservatives are concentrating on *content* (especially reinforcing the philosophical, and mainly elitist notions of the classic ideals of “Bildung” and the like).

More recently, the deep split between the two camps seems to become somewhat blurred. On the one hand, this line of work has lost its “conservative” notion. The successful perfomance of widespread activites relying on the theory of action research has practically shown the merits of a strategy of development and innovation at the grass-roots level, involving teachers in activities of development of their own practice.[12] On the other hand, the strongly bureaucratic structure of the system has come under scrutiny from the center because of doubts about its effectiveness in controlling the system. Therefore the scenario of “giving the schools more autonomy” has got a more concrete shape during the last five years or so.[13]

How does this development fit into the two alternative interpretations of school development? In the macro-sociological interpretation of Margaret Archer we have to ask whether the changes bring about a shift from a centralized to a decentralized system and consequently a change of the developmental pattern from the “stop-go”-mode to the “incremental” mode. We have to note that in this theoretical framework this would be a considerable change of basic structures, which poses several further questions, e.g. who may be the subject of that change, if it is assumed that the various actors in the policy field are themselves constrained by the overall structure of the system. In any case, it would be a big change. In the institutional interpretation of John Meyer and his colleagues the change may be interpreted as a change of the level of decoupling: the split would be reallocated from the level of the individual teachers’ work in the classroom to the level of the whole school vs. the overall system. Thus, in this interpretation the change would be not as fundamental. It would lead to an enrichment of the core process, and thus to a change of the teachers’ work.

Here we have the point, where the question of professionalism and the VET-system comes into consideration again. The above considerations considered the overall education policy. However, there are special conditions in the VET-system. Firstly, we must refer to the aspect of goals in education and training policy. The institutionalists who rely on the concept of decoupling argue that because of the intrinsic uncertainty of the core processes in education the principal problem of making sense of the activity and the environment where it is embedded, or building a normative consensus about what is done in the system and why. “*Given the ambiguity of loosely coupled structures, this suggests that there may be increased pressure on members to construct or negotiate some kind of social reality they can live with*”,

---

[12] Altrichter, H. & P.Posch (1994) Lehrer erforschen ihren Unterricht - Eine Einführung in die Methoden der Aktionsforschung, Bad Heilbrunn: Klinkhardt; Altrichter, H., P.Posch & B. Somekh (1993) Teachers investigate their work : an introduction to the methods of action research. London: Routledge; Altrichter, H., Ed. (1996) Mikropolitik der Schulentwicklung. Innsbruck/Wien: Studienverlag.

[13] Posch, P. & H. Altrichter et al. (1992) Schulautonomie in Österreich. Bildungsforschung des BMUK Nr. 1. Wien.

therefore "*... a predominant activity should involve constructing social realities*".(Weick 1976, 13) Exactly the finding "*that participants share a common conception of general features of the education system in which they participate that is little affected by their specific organizational context*" because they "... *are describing a normative system that exists outside any particular educational organization*"(Meyer, Scott & Deal 1983, 53-54), is one of the strongest empirical support for the theory. The conception leads to the statement that "*a school succeds if everyone agrees thet it is a school; it fails if no oen beliefs that it is a school, regardless of its success in instruction or socialization*"(Meyer, Scott & Deal 1983, 56).

This kind of interpretation gives us a deeper understanding of the preoccupation of actors in education policy concerning endless debates about abstract goals. A good example for the significance of that issue is the relation of academic education to vocational education.[14] There is a clear difference in value between general (academic) education and VET, and this difference is rooted in the basic patterns of belief about education.[15] Considering the position of VET-professionals, we can now find a possible cause for their relative less developed position as VET-teachers, compared to the other categories of teachers, especially the academic ones.

However, if we consider the overall professional profile of VET-teachers, we can see that they are not sufficiently described as teachers, and this hold true even more strongly for trainers. The requirement for the employment as a VET-teacher is the mastering of an occupational field, and some time period of practical experience of work outside the education and training system. In the case of trainers of apprentices the non-teaching occupational field predominates the training role in a way that most trainers do not even perceive themselves as trainers. However, there are different models in the area of crafts and engineering on the one hand, and in the area of business studies on the other hand.

- In the *crafts and engineering area* the basic rationale of the programmes for VET-teacher education and training clearly is that the substantive component of mastering the subject has been learned before beginning the programme, during initial education and training and during the period of practical work experience. The specific teaching skills are additionally provided in the teacher training / education institutions. Several programmes are designed as in-service training, when teachers have already started to do their job at school. This

[14] The European Commission's white paper about teaching and learning explicitly refers to that issue, stating "the end of debate on educational priciples"(p.42f.), and thus inducing the council of education ministers to give a statement in response which includes principal philosophical considerations. See European Commission (1996) White paper on education and training. Teaching and learning – Towards the learning society. Luxembourg: Office for Official Publications of the European Communities; for the response by the Council of Ministers see Amtsblatt der Europäischen Gemeinschaften, 6.7.1996, Nr. C 195/2.

[15] "*Western countries have inherited from Greek civilization a deeply rootes dichotomy of 'culture' and 'work'. This has caused 'theory' to be opposed to 'practice' and 'thinking' from 'doing' throughout the history of education in these countries. The place which vocational education and training occupy today in different education systems (...) reflects these initial schisms ...*". "Avant propos" by the OECD-Secretariat in Gruschka, A. (1994), New approaches to integrated learning, Paris: DEELSA/ED/WD(94)35 (mimeo).

holds especially for the higher ranks of VET-teachers who have completed university studies in their substantive field.

- In the field of the education of teachers for the *business subjects*, a university programme ("Wirtschaftspädagogik") has been developed which provides both, the substantive subject and the pedagogic subjects. Practical work experience outside education is also required in this programme.

From the point of view of professional profiles, the VET-teachers are thus affiliated to more than one profile, the non-teaching profession potentially dominating the teaching field. This "duality" is even reinforced by the fact that several VET-teachers are employed in their substantive field parallel to their teaching activities. A recent survey observed that in engineering about half of the VET-teachers perform activities outside their teaching responsibilities, either self-employed or as salaried employees, in the other areas the proportion is about one fourth to one third. Our field studies have shown that the duality is perceived in a mixed manner by administrators in the system. On the one hand, the choice of a teaching career is jugded as a possible signal for the lack of success in the economy, as a consequence leading to negative selection effects; on the other hand, the duality is seen as a powerful mechanism for maintaining contact and exchange between the VET-institutions and the outside economy. It has been mentioned that this mechanism of direct exchange of experience would naturally bring about the ongoing updating of the teachers' competences. Some administrators systematically try to select teachers who perform successfully their other business. However, in the field of business subjects, where VET-teachers are educated at university, we have observed a potential pitfall of the preoccupation with practical experience which holds true for the crafts and engineering area: Systematic involvement in subject related research and development activities seem to be more developed in the business area.

Looking at the profile of trainers in apprenticeship, we can observe on the one hand that a very high number of persons is in fact involved in training activities. However, in most cases this kind of activities is not even perceived as *training* activities. A short course for holders of apprentices' trainers certificate is predominantly described as a formal duty required by the regulations, but does hardly have any positive effect in practice – frequently even negative effects are reported in causing adverse attitudes to pedagogy because of bad presentations. Only a small fraction of trainers work in environments where a professional approach towards the training activities is taken. Because of long term political struggle, the relation of the trainers in the enterprises to VET-teachers in the part-time vocational schools for apprenticeship is heavily distorted, the two groups degrading each other. Improvement from the side of VET-institutions is not forseeable here. The emerging field of HRD, and the spread of elements of professional HRD practice in the enterprise sector may be seen as a route for improvement of the professional basis of apprenticeship training. The current development in the field of apprenticeship training indicates a rather severe crisis of the system, and a

withdrawal of enterprises from the system, which may be seen in a sharp contrast to widely held beliefs about the necessity of training, learning, and improvement of competences of the work force. So a very rich potential source for the implementation of the “learning organization” may become deterioriated by lack of the professional source to make proper use of it.

However, in referring to the field of HRD, we have brought a third potential “profession” into consideration which seems to be involved and which is based in the enterprise sector rather than in the education sector. This brings us back to the aforementioned issue of coordination. At the outset we had the problem of coordination of distinct systems, especially education and employment, each of them basically organized in a different coordination mode. Now we have arrived at the problem of coordination of at least three potential “professions”. Drawing on the idea that the basic coordination mode of the professions may be the network approach, we may have opened up a new perspective for bringing together our diverse elements.

Reform and Non-reform in the Austrian system: Two cases

In this section, two “cases” of reform in Austrian VET are briefly discussed, to illustrate the functioning of the system on the level of co-ordination mechanisms with respect to development and innovation.

In the background of this presentation, the paradigms of organisational co-ordination modes: market, hierarchy, and profession -- the latter being further differentiated into two subtypes: clan and network -- are used. These models correspond to the existing institutional frameworks of schools, universities, and commercial enterprises working in continuing education.

The co-ordination models developed by organisation theory – bureaucracy, market, and social networks are generalised forms of the modes of organisation of the higher education system developed by Burton Clark in his well-known study. The analysis by Burton Clark poses pure state authority and pure market exchange at the extremes of a continuum of *ideal-type* co-ordination modes. A third mode of oligarchic control is added, referring to "co-ordination by academic oligarchy”. For some time the advantages of market vs. state co-ordination were heavily stressed in the political as well as in the research debate. An evolving bulk of literature in organisation theory, however, stresses the shortcomings of the market as an organising principle, even in the realm of business enterprises and economic activity -- posing *network-structures* as a functional equivalent. As a distinct co-ordination mode networks are built upon the professional paradigm, with *trust* -- as opposed to money or power -- as its central medium of co-ordination.[16] Frances et al. (1991) argue that "it may be that neither the market nor hierarchy will lead to proper co-ordination because both neglect the informal mechanisms that

[16] See Thompson G. et al. (1991), Markets, hierarchies and networks. The coordination of social life, London: Sage & Open University Press especially Chapters 22-23

typify a network of relatively independent social elements. It is only by emphasising the cross-cutting chains of social, political and economic relationships that constitute networks that co-ordination will be, and is, achieved."[17] If we take William G. Ouchi's notion of *clans*[18] as a separate co-ordination mode, a further elaboration of the professional paradigm seems to be possible. Such an elaboration could start from the distinction of *clans* vs. *networks* which has been put by Grahame Thompson into a fourfold classification of co-ordination modes also containing *markets* and *bureaucracies*. As an axis, two approaches to relationships -- competitive and co-operative -- were used, as well as two units of organisational forms -- hierarchical and independent -- to form the other axis. Clans are classified as the hierarchical item; and networks, as the independent item of the co-operative dimension.[19] We should hold that organisational analysis points out that real co-ordination should be seen as a kind of *mixture between the different "ideal-types".*

The apprenticeship system as the case of non-reform

The apprenticeship system is organised in a very complex manner, involving three major legal frameworks (laws which regulate schools, a law which regulates the work-based part of the system, and a law which regulates basis structural features of economic activity) and many different institutions (the Ministry of Trade and Commerce, the Ministry of Education, the Institutions of Social Partnership: Unions, Employers Organisations, both Chambers of Labour and of Trade and Commerce). The social partners have an important influence in controlling the system, important decisions being drawn on a consensual basis. However, the system of control is biased towards employers' power in giving administrative functions to the chambers of trade and commerce. This feature does heavily undermine the relations of trust between the different actors involved.

Referring to the basic models of co-ordination known in social sciences, the apprenticeship system is an outstanding case, in crosscutting the bureaucratic, the professional, and the market coordination modes, and in being at the same time centrally regulated and decentralized. In many policy documents the consensual manner of running the system is emphasised. However, there has been a long-standing struggle going on about reform of the system, without reaching a consensus. Three structural elements of the apprenticeship system have been debated most fiercely:

⇒ first, the number and breadth of occupational categories;
⇒ second, the proportion of mandatory part-time schooling, and
⇒ third, the mandatory use of additional teaching/learning institutions if the environment of an enterprise turns out to be not sufficient in providing the demanded qualifications.

---

[17] Frances, J. et al. (1991) Introduction, in Thompson et al., loc. cit., p.3.
[18] Ouchi, W.G. (1980) Markets, bureaucracies and clans, Administrative Science Quarterly, Vol. 25, p. 129-141
[19] See Thompson, G. (1991) Comparison between models. Introduction, in Thompson et al., loc. cit., p. 244.

In addition, the system of quality assurance -- concerning the indicators to be used as well as the power of involved actors in these processes -- has been considered an important issue.

Recently the system has run into a severe crisis, and policy action has been taken by the Austrian government.

During 1996 and 1997 a broad programme of reform of the apprenticeship system has been developed, which should be implemented in 1997 and 1998. The government, the departments of education, science, labour, and economic affairs, and the social partners have been included in that process. The following dimensions are concerned:[20]

- Amendment to the Vocational Training Act (loosening of employment protection of certain kinds of apprentices, easier access to exit examinations, change of requirements for trainers' qualifications to open up certain professional services for apprenticeships)
- A task force for the development of broader profiles of apprenticeship training, and for finding new solutions for the regulation of the numbers of apprentices in relation to the number of employees
- A task force for the development of new apprenticeship trades for the future trades and occupations
- A task force for the development of strategies for the acquisition of additional training slots, and for the improvement of the promotion strategies, including mechanisms for re-allocation of funds for training
- Promotion of training equipment and establishments, as well as of further education and training of apprentices
- Changes of outdated restrictions for youth in employment protection laws and regulations (especially concerning working time restrictions)
- Redistribution of social security payments of the employers from apprentices wages to salaried employees' wages, thus reducing non-wage labour costs for apprentices;
- Implementation of compulsory educational and vocational information in the lower secondary school;
- Improvement of co-operation between schools and enterprises;
- Reform of the Pre-Vocational Year at the 9th grade of compulsory school;

---

[20] Cf. S.Gittenberger (1997), "Maßnahmenkatalog zur Reform der Lehrlingsausbildung." *Recht der Wirtschaft*, No.4, 210-11; G.Gerstbauer (1997), "Reform der Lehrlingsausbildung" in *Die Nachqualifizierung von Jugendlichen und Erwachsenen* ed. by F. Lechner, W.Reiter & W.Schlegel. Forschungsberichte aus Sozial- und Arbeitsmarktpolitik No.61. Vienna: Federal Ministry of Labour, Health, and Social Affairs, 267-269; K.Schedler (1997), "Innovative Impulse für die Lehrlingsausbildung - Ein Anstoß zur Diskussion." *ibw-Mitteilungen*, No.3 (March), 8-12.

- Implementation of a Vocational Matura ("Berufsreifeprüfung") to improve access to higher education, and development of additional preparatory courses in the TVE sector;
- Reform of the structure of the part-time VSA towards a block release system instead of a day release system.;
- Councils for the implementation of quality management in apprenticeship training should be nominated by the social partners;
- The fragmentation of responsibilities among the various institutions should be analyzed and solved by a proposed co-ordination mechanism.

The recent programme of measures which is supposed to solve the crisis in the apprenticeship system shows a complex structure which involves a broad array of measures which have mostly a long history in the Austrian debate, some of them having been on the agenda in a similar manner for decades. Because there is a high commitment in the political system to provide favourable conditions for transition of youth to education, training and employment, the signs of crisis have quickly brought the principal actors to action: the government, the social partners, and the involved institutions. Steps towards solutions which have been stuck in conflict for years may now be taken during months.

Concerning our discussion, the evolvement of the programme is interesting. In the course of three or four months some task-forces designed by the Chancellor had to provide solutions to long-standing problems. The programme therefore was designed in the policy system in a highly ad hoc manner. Research was not involved, although the programme is based on some strong assumptions about the causes of the crisis which give room to doubts about its efficacy. However, there is no open debate about alternative strategies.

Concerning the two alternative interpretations of the relationship of organizational structure and reform, the case of apprenticeship is difficult to interpret in the centralism-decentralism scheme. At first glance the system seems clearly a decentralized system, coordinated by the market mechanism. If we take this seriously under consideration, the "incrementalism"-pattern has to be rejected. There is no incremental change in the system. We have already noticed that the market is embedded in a framework of centrally controlled regulations. That framework may be interpreted as blocking the incremental mechanism, thus influencing the actors to prefer the exit-option, after the voice-option has not been taken for a long time. This kind of reasoning is actually taken, and there are proposals to deregulate the system so that the market mechanism can work. However, in the institutional interpretation the loose coupling may occur at the split between the market and the regulations so that the regulatory system may be essential for the survival of the system.[21] A third aspect which should be taken into

[21] This argument may be reinforced by the fact that all apprenticeship systems which have survived as strong systems are embedded in the state system by detailed regulations – apparantly in other systems where the apprenticeship system did not survive it was organized on a more private contractual base.

account is the aspect of the strong “vocationalism” of the apprenticeship system and its relationship to professionalism. Maybe there is a hidden mechanism of professional networks at work, which contributes to the coordination of the apprenticeship system.

Setting up of the Fachhochschule sector as a successful reform

In 1993 a new law has been amended which constitutes a new type of institutions at the postsecondary level: the *Fachhochschulen*. In contrast to most western countries, non-university institutions have developed on a relatively small scale which are concentrated on the field of teachers for both primary and lower secondary general schools. During the 1970s and 1980s the dominant orientation of education policies was not to expand the non-university sector, but rather to reinforce the technical/vocational streams of the secondary schools. It was not until 1988/89 that the question of the non-university sector was once again taken up in discussion. In the beginning of the nineties, after a very short time -- and initially, without further work on concrete implementation issues -- a general basic decision for the creation of new institutions was taken up in the course of the formation of a new government. The establishment of a new non-university sector of higher education thus rapidly came up on the political agenda.

Subsequently to the agreement between the political parties, the discussion has developed in several waves. The principal process was evaluated by an OECD review (BMWF & BMUK 1992). Although there was some research done in the process of development of proposals, the proposed concepts were developed in the realm of the political and administrative system. The proposed models for the new institutions in Austria can be classified within the realm of co-ordination models developed by organisation theory.

Three concepts attempted to develop markedly flexible solutions for the regulating framework. They included the extreme version of a "*market concept*": while containing only few explicit statements on the legal framework beyond a general denigration of the "existing organisation of state education", this concept implied that only an extreme minimum of public control or influence should be provided. Funding by public authorities was also intended only as a last resort. Two further concepts, which could be termed the "*privatisation concept*" and the "*accreditation concept*", attempted to develop flexible and innovative concepts of organisation in a more moderate form with a higher degree of public control.

At the other extreme was a "*regulation concept*" conceiving the form of organisation of the new non-university institutions largely on the pattern of school administration. The other concepts were located between the extreme concepts in being flexible and innovative in matters of establishment, maintenance and operation -- but they were rather traditionally oriented towards the centralised and bureaucratic school system in matters of study organisation.

If we analyse the process of policy formation with respect to the interest groups represented by the proposals, we can identify positions cross-cut to a considerable extent traditional political and ideological borders. The accreditation concept, which has been taken as basis for the common proposal of the two ministries, is a product which has been developed mostly in the realm of the central administrative bodies of the education and higher education system, assisted by some experts from universities or other research institutes. Political loyalties were mixed along the line of the coalition between the Social-Democratic Party and the Conservative Party.

The solution which has been chosen as organisational model for the Fachhochschule framework clearly differs from the overall system. It was intended as a “professional” model, which means that the central decisions about setting up programmes should be taken by a professional accreditation body. Professionals were defined by their education and their experience. On the basis of some general criteria, the study programmes can be developed and proposed by a group of experts and is evaluated subsequently by the FHS-council on the basis of demand and quality criteria.

The implementation process of the Fachhochschule is also under a process of evaluation. Here we can see that the professional concept is not easily implemented in the Austrian context. In the process of policy formation the concept of the “reflective practitioner” was proposed as a model for the new study programmes (cf. BMWF & BMUK 1992, Ch.B3). Another concept has put emphasis on research concerning the respective occupational areas as an element to constitute the professional identity of the Fachhochschule. The idea behind this is that development of curricula as well as proper teaching could be developed best on the background of a well rounded knowledge about the occupational field in question, and, in addition, research about the development in the occupational field would also be a good basis for further development of the programmes (cf. BMWF & BMUK 1992, Ch.B4).

The implementation of the Fachhochschule which started in autumn 1993 required professionals to constitute the FHS-Council on the one hand, and professionals which would propose FHS-programmes on the other hand. The evaluation shows that it has not been easy to fulfil the requirements. The required qualifications are not foreseen in the Austrian environment. The implementation process may be characterised rather as a political pragmatic undertaking than a professional one. The evaluation shows that the members of the FHS-council report about themselves, that they have been lacking expertise and experience for the accreditation process. Interestingly, most of the members of the FHS-Council do not put much emphasis on research and further education in the field of quality assurance and innovation.

Thus the development of the Austrian Fachhochschule shows that it is possible that a very different framework is set up, however the required professional expertise for the proper running

of the new institution has to be developed during a rather long term process, and it is difficult to assess whether that process has started already.

2. Vet-Professionals

Based on the description of the system, we may now give a first overview of the various categories of "VET-professionals".[22] Concerning the division of labour among the professionals we have a separation of the following categories:

1. Different kinds of *VET-teachers*, who are clearly separated by different education pathways, and in addition are not normally doing research. (Especially three kinds of VET-teachers may be distinguished between, who are different concerning education and status: (1) teachers at the part-time vocational schools compulsory for apprentices; (2) work-shop teachers at the full-time vocational and technical schools; (3) teachers for the theoretical-vocational subjects, e.g. in business or engineering).
2. *Trainers for apprenticeship in enterprises*, who in the past did not have any training concerning their educational functions, and now have only a small amount of training;
3. Teaching personnel in the institutions for initial and continuous *VET-teacher education and training*;
4. *Decision makers* who are responsible for changes in the system: Administrators, politicians, and representatives of the social partners (lobbyists);
5. *VET-Researchers*, who are mostly outside the academic system, affiliated to small and young institutions, some of them linked to the social partners, and who compet on a market for research contracts;
6. *Human resource development personnel* in many small counselling firms, and in large enterprises;
7. *Personnel in adult and further education*, who mainly do their work part-time on a free-lance basis.
8. *Personnel in intermediary institutions*, who provide various mixes of services, and whose function mainly is networking between the various involved actors and institutions.

[22] The term "professional" is used in a loose manner during this description, and will refined during the following sections.

B) Research Design

The following issues have been investigated in Austria:

1. the institutional structure of the Austrian VET-system
2. the existing profiles of VET-professionals in Austria
3. the supply of training for the VET-professionals
4. the demand for new professional qualifications in the VET system
5. possibilities for development of new VET-professionals.

To find some starting points for processes of change and innovation, and to find the actors who could bring those kind of processes on their way, a detailed analysis of the institutional structure of the Austrian system was performed. A starting point for this analysis was the assumption that the institutional structure of the Austrian VET-system is highly differentiated and fragmented, and the various actors in the different sectors and functions are not or poorly co-ordinated. No detailed view of the whole system existed. Therefore in a first step the institutional structure, and the different kinds of actors working in the system had to be identified in greater detail. To describe the degree of differentiation in the system, the following dimensions must be mentioned:

- *the sectors of the VET-system* (Schools, Universities, Fachhochschulen, Apprenticeship, Further/adult education, HRD, Teachers'/trainers' training)
- *occupational, and employment sectors* (the economy, as well as the VET-system has a high degree of institutional differentiation according to trades/professional fields; these branches are in many respects the most important level of decision making, and the main level of institutional integration)
- *functions, and levels of decision making* (political-legislative functions, steering, administration-management, controlling-evaluation, teaching, research-development)
- *regional and institutional aggregation level* (central, regional, local; system, institution, individual)

As a second issue the existing profiles of "VET-professionals" were identified, based on the above description of the fields of action: VET-teachers, trainers in enterprises, decision makers, researchers, human resource development personnel, personnel in adult and further education, etc. In fact, the only category in that list, which has a clearly defined and well-known profile are the different kinds of VET-teachers within the school sector. About all the other categories poor information is available. Therefore a more detailed analysis of those profiles is necessary, including the analysis of the education and training paths of the professionals.

The third issue, the identification and analysis of existing training programmes for VET-professionals had mostly to deal with the existing formal training programmes of the traditional professional categories, especially VET-teachers. The remaining tasks, identification of demand for new professional qualifications in the VET system, and the outline of possibilities for development of new VET-professionals could be performed to a limited degree only. A broader information base would have been necessary to investigate those issues sufficiently.

1. Materials and analyses describing VET-Professionals

The task of giving an overall description and analysis of VET-professionals in Austria turned out to be a rather pioneering one. No comprehensive account of that area existed, and the material available is mostly rather superficial, and consists mainly of regulatory documents attached to special areas. An overview about the profiles and the training courses of VET-teachers was given recently in the CEDEFOP-series[23]; the incidence of activities in further education of VET-teachers has been analysed in the beginning of the 90ies[24]; some steps have been taken to get an overview about further education[25] and adult education[26]; a study about VET-research in Austria has been employed as a part of the OECD study on Educational R&D some years ago[27]; the framework of the newly established *Impuls*-centers for regional development has recently been analysed[28], and in parallel to our study a survey about the professional development in the Fachhochschule-framework is going on which will be finished in the beginning of 1998.

Further important sources have been the participation in a number of task forces and workshops about the future development of the education and training system in Austria. Especially have to be mentioned two broad symposia about future trends in the initial and the

---

[23] CEDEFOP (1997), Teachers and trainers in vocational education and training. Vol.3. Luxembourg: Office for Official Publications of the European Communities.

[24] Faßmann, H. (1994), Lernen Lehrer? Eine empirische Erhebung über das Ausmaß der Lehrerweiterbildung im berufsbildenden mittleren und höheren Schulbereich. Resarch report commissioned by the Federal Ministry of Education and Cultural Affairs. Vienna (manuscript); Faßmann, H. (1995), Fortbildungsverhalten von Berufschullehrern. Resarch report commissioned by the Federal Ministry of Education and Cultural Affairs. Vienna (manuscript)

[25] Cf. Kramarsch, M. (1995), Training '95/96. Das Handbuch zur beruflichen Aus- und Weiterbildung. Vienna: Signum.

[26] Cf. Lenz, W. (1996), Situation und Perspektiven österreichischer Erwachsenenbildung. Ch. 2.5 in: BMUK (Federal Ministry of Education and Cultural Affairs, Ed.), Entwicklungsgrundlagen für das österreichische Schulwesen. Vienna (manuscript).

[27] Cf. Lassnigg, L. & H. Pechar (1994) Bildungsforschung in Österreich. Österreichischer Länderbericht zum 3. Internationalen OECD-Seminar zur Bildungsforschung und Entwicklung. Vienna: Mimeo.

[28] ÖIR (Austrian Institute for Regional Planning) (1997), Die regionalpolitische Relevanz von Impulszentren in Österreich, research report. Vienna (manuscript).

further education system[29], and two task forces commissioned by the Minister of Education and Cultural Affairs about the development of education and training policies in Austria.[30]

The work builds also on former studies, and involves the analysis of documents and regulations.

2. Expert interviews

Another important source of information have been several expert interviews of different depth performed with various kinds of experts from several sectors of the system. Because of the broadness of the subject of the study, and the high degree of differentiation in the system a twofold strategy of generation of information was employed: On the one hand, some formal expert interviews were performed especially with representatives in the system of initial VET (VET-schools, administration of schools, apprenticeship, VEt teacher education). On the other hand, several more informal, and frequently very limited and punctual enquiries were performed concerning experts in the other areas.[31] The rationale for this was that it turned out impossible to find a limited number of well informed experts to justify the relatively high costs of a formal interview.

Formal interviews were performed during April to July 1997 mostly by the authors with persons from the following areas:[32]

Schools: Headmasters, teachers, head of department

Administration: Education administrators (Department of Education)

VET-teacher education and training: Headmasters of PIB and BPA,
university professor

Research: Researchers

---

[29] BMUK (Federal Ministry of Education and Cultural Affairs, Ed.) (1996), Neues Lernen für die Gesellschaft von morgen. Zukunftsforum VI. Innsbruck: StudienVerlag; Koller, E. & E. Burda-Buchner (1996), Neue Wege in der beruflichen Aus- und Weiterbildung. ZSE-report Nr.17. Vienna: Zentrum für Schulentwicklung.

[30] Cf. BMUK (Federal Ministry of Education and Cultural Affairs, Ed.), Entwicklungsgrundlagen für das österreichische Schulwesen. Vienna (manuscript); Lassnigg, L. (1997), "Megatrends" in Demografie und Arbeitswelt - Entwicklungslinien in Österreich und bildungspolitische Konsequenzen. Entwurf, Ergebnisse des Workshop im BMUK. Vienna (manuscript).

[31] This kind of inquiries was frequently performed during conversations and discussions held at several locations in Austria about issues of VET-policy, e.g., events concerning the evaluation of labour market programmes, regional round tables about qualification supply and demand, a LEDA-seminar about regional policies, strategic discussions with groups of VET-teachers, or representatives of regional institutions for adult education, task forces in the course of the development of a government strategy for innovation and qualification, a task force for the development of a DELPHI-study about future qualification policies, and the like. In addition, there were more informal interviews performed with experts, or representatives, of regional research, innovation policies, further education, and consultancy firms. Many specific inquiries have been necessary, of course, for claryfing special aspects of the Austrian VET-system.

[32] Formal interviews were performed with 14 persons, two of them performing double or triple functions.

Further education: Trainer in Second chance further education (also VET-teacher)

Companies: Trainer of apprentices, department manager in a big Austrian company (also VET-teacher), supplementary trainer of apprentices (also VET-teacher)

The selection of the interview partners has been made on the basis of „well known“ experts and by „multiplier lists“. The formal expert interviews were were fully transcribed, and analysed using the methodological suggestions from Meuser & Nagel 1991, 1996[33]

3. Surveys

It would have been useful to carry out surveys especially about the “new” professionals in Austrian VET. However this remains a task to be performed in the future because there were no suffient financial means within the current project.

In order to get an overview about the subject structure, and the main topics of VET-teacher education, an anlysis of the existing curricula for initial VET-teacher education, and the supply of in-service training for VET-teachers was employed. For this pupose the existing curricula were collected (10 for initial VET-teacher education, 31 for preparatory courses or special additional qualifications), and classified per variables like taught subjects, and hours per subject; in addition, the catalogue which provides information about further education at the in-service VET-teacher education colleges was classified per similar variables.

[33] Meuser, M. & U.Nagel (1991), ExpertInneninterviews - vielfach erprobt, wenig bedacht. In: Garz, D. & Kraimer, K. (Eds.), Qualitativ-empirische Sozialforschung. Opladen, Westdeutscher Verlag, 441-471; Meuser, M. & U.Nagel (1996), Vom Nutzen der Expertise. In: Voges, W. (Ed.), Kommunale Sozialberichterstattung. Leske & Budrich.

C) Results

1. Vet-Professionals in different fields of action

The overall VET-system in Austria can be broken down by the following basic components which are more or less severely separated from each other:

- The *initial VET-system* (especially VET-schools and apprenticeship, higher education may also be seen as a part of it),
- the *formalized system of further education and training* (especially the training institutions run by the social partners, and by the public employment service),
- and the widespread, though to a high degree invisible, *informal system of enterprise training* which predominantly takes the form of on-the-job activities (we may term this part of the system using the somewhat restricted concept of Human Resource Development).

Considering the respective weight, and the relationships between the mentioned parts of the system, the highly formalized initial VET-system clearly is the most developed one. The public education budget is mostly spent for the initial VET-system. Further education is less formalized, and there is a lack of information even about such simple indicators as participation rates, or structures of supply. Financing occurs to a large part from private means, however, there are some additional means from labour market policy spent for training activities. The area of HRD is even less developed, and has hardly come under consideration in policy discussions.

Based on this principal structure of the VET-system, and taking into account the division of labour among the professionals, a first overview of the various categories of “VET-professionals” in the Austrian system comprises a separation of the following categories:

1. VET-teachers
2. Trainers for apprenticeship in enterprises
3. Teaching personnel in VET-teacher education and training;
4. Decision makers
5. VET-Researchers
6. Human resource development personnel
7. Personnel in adult and further education
8. Personnel in intermediary institutions.

The various categories of VET-professionals live and work in different “worlds”, frequently lacking co-operation, and sometimes even acting against each other. As an example, there are deep lines of conflict between the various actors and institutions involved in the apprenticeship system. One is between the representatives and experts of the main social partners,

employees on the one hand and employers on the other hand. A second divide exists between the public part of the system (part-time compulsory school for apprentices) and the enterprise part of the system, involving the school teachers and the trainers in enterprises as well as the administrators and political decision makers. In addition, the trainers in enterprises, who are perhaps the most widespread category of VET-professionals, and who are obviously at the centre of the vocational training system, are mostly not perceived as VET-professionals, because they are doing their training work part time, besides their "normal job" – many of them do not even feel as training professionals themselves. Another divide is between schools for young people on the one hand and adult education on the other hand. In this area a highly bureaucratic system gets in touch with a mainly market oriented system. Consequently, there are all kinds of well-known prejudices, which are sometimes even exaggerated in the public debate. Some groups within adult education are pressing for a legal basis, including more security and predictability for the system. This position is heavily challenged by the people of the "market fraction", who fear more bureaucracy and rising costs for public budgets.

Concerning the distinction of "old" and "new" VET-professionals, we may refer to some developments of the institutional framework in time and to an assessment of the functions or roles of the VET-professionals. The positions (1) to (5) of the above list of professional categories in the VET-system are more or less synonymous to occupations as well as to functions or roles: teachers, trainers, different kinds of decision makers (administrators, politicians, lobbyists), researchers. The remaining positions (6) to (8) are more diffuse categories, defined by the institutional context to which the professionals are attached.

Now we want to give an overview of the different education and training paths, which are leading to the respective qualification as VET-Professionals:

2. Training pathways for VET-professionals

1. VET-TEACHERS

The only category of VET-professionals listed above, which has a clearly defined and well-known profile is that of VET-Teachers within the school sector. Because of the high degree of differentiation among this category -- which is difficult to understand even by Austrian experts – we give firstly an overall introductory view about the most important categories of formal training programmes for VET-Teachers (a more detailed analysis will be given later in Chapter C 3 „Examples of VET-Programmes").

Principally, there are two institutions devoted to the training of VET-teachers, the VET-teacher training colleges (BPA - *Berufspädagogische Akademie*) and the institutes for in-service teacher education (PI - *Pädagogische Institute*), who include a VET-department. However, the overall training programmes for most of the categories of VET-teachers are only partly located

on those principal institutions, which provide especially the pedagogy and didactics. Most training programmes for VET-teachers comprise a basic structure which includes the following elements:

- Completion of an *initial education and training course* in the subject to be taught (depending on the subject, and the level of teaching, this may be a master craftsmen credential, or a upper secondary VET school credential, or a university diploma)
- Some time of *practical experience* acquired by employment in a related occupation outside of the school sector (the required time span may be last between 1 and 6 years minimum, of course it may be longer)
- Completion of a course in the *VET-teacher training institutions*, which takes place after one is employed as a teacher on a provisional contract, and is mostly a combination of the following elements taking three years in sum:
    - a period of part-time in-service training (at PI or BPA) while acquiring teaching experience, and
    - a period of full-time training (at PBA) while on a block release from the teaching responsibilities.
- There are various forms of *exceptions of that general pattern*, e.g., full-time programmes at VET-teacher education institutions without a teaching contract and the required practical experience after teacher training, or a specialized university programme.

With some exceptions, the overall profile of VET-teachers is dominated by the requirement for non-teaching qualifications, and for non-teaching practical experience. Among these VET-professionals the identification as a practician in the initial occupation prevails over the identification as a teacher frequently, and this habit is reinforced by the fact that a high share of VET-teachers are also working in their initial occupation beneath their teaching activities.

There are three principal levels of teacher training courses for the VET subjects concerning the educational entry requirements: master craftsmen certificate, *Reifeprüfung*-Certificate from upper secondary school (which is in Austria the precondition for enrollment in higher education), university diploma.

A rather common requirement for taking a course at a VET-teacher training college for most of the various categories of VET-Teachers is the completion of a Reifeprüfung. People aiming to teach the technical-practical subjects at VET-Schools must have at least the master craftsmen qualification. In addition, the admission to these colleges presupposes a certain spell of time of work experience in the occupational field concerned (the required time spell lasts for 1, 2, or 6 years depending on the subject to be taught). The programmes at the training colleges last for three years and end with a formal examination.

Teachers for the theoretical-vocational subjects must hold a university degree in addition plus four years work experience. Then they have to undergo a teacher training college (lasting for two years). The Teachers of Business and management is the only group of VET-teachers, who undergo a specialized university training for their profession. Those teachers needs two further years of professional experience in the relevant field before a regular teaching contract can be awarded to them.

Table 1: Rough numbers of VET teachers (head counts)

a. Full-time Schooling	
Full-time VET Schools and Colleges	20000
Engineering	6000
Tourism	1000
Business	5000
Home Economics	5000
Social work	200
Agriculture/Forestry	2000
b. Part-time Schooling	
Vocational Schools for Apprentices	4500
c. Non-university tertiary institutions	
Non-university Teacher Education*	3000
TE Secondary Level	1200
TE Tertiary Level	1800
Other non-university Tertiary Institutions	200

* Teachers in general and VET-teacher education, without university teacher education

According to a recent survey we have information about the incidence of an additional employment of VET teachers in other activities beneath their teaching responsibilities. Among the teachers in fullt-time VET-schools this kind of additional employment ranges from about 50% in engineering subjects to about one third in business and home economic subjects; among teachers in part-time VET-schools about 50% are engaged in additional activities (selfemployed: 17%; employees: 11%; trade union activities: 7%; other: 13%)[34].

[34] Source: Faßmann 1994, 1995.

2. TRAINERS FOR APPRENTICESHIP IN ENTERPRISES

To understand the profile of the trainers for apprenticeship in the enterprises we have to understand the basic structure of apprenticeship in Austria. We have to distinguish the formal requirements for an enterprise to be accredited as a training-enterprise, which include at least one holder of a certificate for apprenticeship training, from the actual performance of the training processes which may be delegated to anyone employee.

The enterprise part of apprenticeship is highly decentralized. About 60.000 enterprises are accredited to perform apprenticeship training, about 45.000 actually have enrolled apprentices -- compared to the sum of 1050 full-time vocational and technical schools this is a very high number. The average number of apprentices per enterprise is less than three (80 per cent of training enterprises have employed 1-3 apprentices, only three per cent of training enterprises have employed larger groups of 10 or more apprentices).

The enterprise training is performed mainly on the job, supervised by employees beneath their productive work. Concerning the training activities of trainers we may roughly estimate that training activities consume on average about 200 hours per year (4 hours weekly) per apprentice, which is about 10 per cent of the working time of one employee. Only about 5 per cent of the training enterprises (2.300 enterprises) have employed full-time trainers. In sum there may be 15.000 to 20.000 full-time equivalents of trainers in the enterprises, which is roughly equivalent to the number of teachers in full-time vocational and technical schools. However these full-time equivalents are dispersed across the high number of enterprises. In total, more than 50.000 persons are actually involved in apprenticeship. About 10 per cent of training enterprises do have extra infrastructure for apprenticeship (work shops or some extra facilities), 90 per cent are integrating their apprentices totally into the normal working process.[35]

Because of the described structure a main point concerning apprenticeship trainers is a widespread lack of professional identity as trainers. Trainers, except the small number of full-time trainers, are mostly perceiving themselves according to their principal (non training) occupation.

Concerning the certificate for apprenticeship training, the training requirements for the performance of this function are very low. Enterprises which provide apprenticeship training need trainers holding the master craftsman qualification plus a special qualification in pedagogy.

---

[35] Cf. Lassnigg, L. & Steiner, P. (1997), Die betrieblichen Kosten der Lehrlingsausbildung. Materialien zu Wirtschaft und Gesellschaft Nr.67. Vienna: AK-Wien.

To get the certificate for training apprentices, there are two opportunities in Austria that may be choosen:

1. As a part of the programme of acquiring the master craftsman's diploma, you have to take an exam about training apprentices. But it doesn´t matter for the overall success, whether you pass this exam or not. The institutions of adult education offer these courses, which should prepare for the exam. The courses last about 40 hours and end with an examination in the following subjects:

    - pedagogy and psychology in training
    - training methodology
    - methodical planning and implementation of training and apprectice
    - performance assessement
    - legal foundations of training

2. If you just want to make the exam for training apprentices seperate, you have to pass an exam, which is hold by a commission of the federal government. Applicants also can prepare for the test with training courses mentioned above.

The existing training requirements for the accreditation as a training enterprise, despite they are very low scale, are highly objected by many representatives from the enterprise sector as being unnecessary at all. It is planned that the completion of a short course (ending with a „final-talk" to the trainer) will be sufficient to pass the exam.

3. TEACHING PERSONNEL IN THE INSTITUTIONS FOR VET-TEACHER EDUCATION AND TRAINING

There are three categories to be distinguished among the teaching personnel in the institutions for VET-teacher education: the teachers for the human-related subjects, the mentors who are providing assistance during case and process oriented pedagogical work, and the *Lehrbeauftragte* who give the non-pedagogical occupational subjects.

To become a teacher for the human-related subjects, e.g., Psychology, Sociology, Educational Science, at the teacher training colleges, the following qualifications are required:

- a pedagogical university education
- 6 years excellent education practice
- Scientific publications

Those teachers are called „LPA"-teachers and they have the highest status and a higher income than normal teachers as well. The position is one of the rare opportunities for

progression during a teachers' career. But as you can see, no experience outside the education system is necessary to become a teacher for prospective teachers.

However this kind of teacher is only a small group at the colleges. A second group of teachers is called „the mentors". Those people are teachers in schools (who have to be good in pedagogy and didactics) and teach at the colleges part time beneath their job.

The third group of teachers are the *Lehrbeauftragte*. The teachers of that category are giving the vocational subjects. There is no requirement of a pedagogical education, but they are working in the industry and they have to be specialists in their practical field. Their appointment is limited for a certain time (until the training course at the teacher training college is finished).

4. DECISION MAKERS

The decision makers who are responsible for changes in the VET-system (administrators, politicians, and representatives of the social partners) mostly have their background in the parts of the system they control. Positions are taken in the course of career processes, and formal requirements are seldom the main issue in those processes. Some types of pathways can be distinguished:

Within the school sector of the VET-system *the teachers* are the main source for the recruitment of the decision makers, the first step frequently being the position of a school principal or a lower level official in the administrative bodies. Until recently the recruitment for the decision making positions, especially the principals of schools, and also the recruitment process of teachers, was governed by political bargaining in the regional school boards due to the proportion the political parties had gained in the course of the general elections. That mechanisms are now under reform, after having been heavily criticised for a long time for several reasons, one being the appraisement that the qualification of applicants was estimated as a minor factor in the selection process.

The parts of the system which are controlled or influenced by the social partners, especially apprenticeship and the main institutions of vocational further education and training are run by two lines of decision makers, political functions which are performed mostly part-time by practicians of the respective fields, and administrative and staff functions. The politicians are recruited mainly from the *practicians* of the respective fields, i.e. the entrepreneurs in the various trades and industries who are organized in a strongly differentiated system of economic chambers, and the employees' representatives who are organized in the trade unions and the shop floor councils. The administrative staff is partly recruited "internally" from the source of practicians, and partly by "external" recruitment processes at certain entry points, i.e. for *young graduates or experts*. The system of political parties and the affiliated occupational and

professional organizations is an important intermediate factor in that process of recruitment and selection of decision makers.

The remaining parts of the system (HRD-activities, research organizations, and intermediary institutions) are to some extent controlled directly or indirectly by the decision makers of the education system, and the social partners representatives, and to some extent the decentralized decision making and selection processes driven by the market forces are at work. The weight of these two kinds of forces differs with respect to the field under consideration: The HRD-activities are mainly controlled by market driven processes, whereas research and intermediary activities are influenced by the above mentioned institutional forces to a high extent, especially through the channel of financing.

In general, the recruitment process of decision makers in the Austrian VET-system does not rely very much on explicit qualification criteria considering a formal knowledge base for the planning and management of VET-activities, or VET-institutions. Moreover, we can hardly find offers of education and training for that purpose, and a demand for this kind of offers is articulated at seldom occasions. One of these occasions is the more recent attempt to develop and implement more “professional” recruitment mechanisms for the school pricipals, another occasion which may be seen as a more paradigmatic one for the austrian system is the implementation of the new *Fachhochschule* framework.

5. VET-RESEARCHERS

In the discussion of the division of labour among the “professional” profiles in the Austrian VET-system, we have pointed to a marked separation between VET-practice and VET-research. This observation has been strongly reinforced in our field work. The representatives of the VET-system frequently could not even imagine what research could potentially contribute to their problem-solving activities. The situation which is described by Michael Eraut (1994) of a split between knowlege and making use of that knowledge in practice seems strongly to be present in Austrian VET.

Research in vocational education is provided mostly as contractual research by institutions affiliated to the social partners, and it was mostly founded by the labour market authorities. This means that research about vocational education and training is not located in universities, and not in teacher training institutions.

Formalized education and training pathways leading to reserch qualifications in the VET area are lacking almost completely. There is no university course which covers the VET area in a comprehensive way, one possibility for aquiring knowledge in this field is to specialize in this field individually in the course of a doctorate study. The main qualification pathway, however, is *training on the job* by the performance of commisioned research projects in the VET research

market. The available institutions which are performing this kind of research do not own sufficient resources for an investment in the qualification of young researchers, and therefore the development of research expertise is not performed in a systematic way in Austria.

6. HUMAN RESOURCE DEVELOPMENT PERSONNEL

HRD-activities are not reported regularly, and have seldom been investigated into on a systematic basis so far in Austria. Of course there are enterprises in Austria which are involved in HRD, however there is no information available about the incidence of their HRD-activities. Accordingly, there is no sufficient information available about the personnel working in this field, and the respective recruitment channels

A study from the early nineties about enterprises which were judged by their "peers" as pioneering in human resource management has found only large enterprises which employed more than 1,000 employees performing in this field. Further impressions were that the field was very much in flux, and in many enterprises more or less separated from the core functions; the managers in the field were described as more or less isolated from each other, showing a low degree of networking across the boundaries of firms (Boos/Heitger 1993).[36]

In addition, a market of consulting firms is developing, however, the firms are very small, and a lack of quality control is frequently complained about. The main path of development in that field seems to be the setting up of branches of large international consulting firms in Austria, and the building of partnerships between Austrian consulting firms and firms in other countries.

Some first steps are taken in the development of an institutional base for research and education in this field in some university departments.

7. PERSONNEL IN ADULT AND FURTHER EDUCATION

As there is no specialized professional profile of personnel in adult education, there are also no specialized courses or institutions for the education and training of that personnel. There are some university institutes where professors specialize in adult education, however the activities are too small scale to have an impact on the qualification of the personnel working in adult education.

As industry plays the by far biggest role among organizers and providers of further training programmes, and most events are organized and carried out by the companies themselves, there is, of course, an overlap of HRD-personnel and personnel in adult education. Some

[36] Boos, F. & B.Heitger (1993) Modernes Personalmanagement und arbeitsmarktpolitische Konsequenzen. Research report. Vienna: Bundesarbeitskammer (Chamber of Labour).

sectors, e.g., the public administration, banks and insurance companies, own also specialised institutions for in-service training. Another overlap in the area of adult education is occurring in the school sector, where some specialised institutions of second chance education are located, and, additionally the training of master craftsmen is partly organized within the school system too. Labour market training which is organized as a main component of labour market policy is another important category of the VET-system for adults. The public employment service owns some training institutions, however, the most part of training is provided by the adult education and training institutions operating on the market.

The main basis for the personnel of adult education are the special institutions for further education and training. The ten main organizations which organize events of adult education in Austria have formed a loose network (KEBÖ), which is collecting some information about adult education and training. In total, about 150.000 further education events with an overall participation of about 4.9 M. cases[37] are organized by the network. That means that the reported participation includes a wide range of different activities, which are only partly vocational education and training. The personnel employed by the KEBÖ network is 3.800 employees plus 67.500 persons who are participating on a part-time basis in this work (38.700 of which are salaried, and 28.800 who are freemen).

Because we lack information about the subjects of the reported activities, it is not easy to identify sufficiently the share of vocational education and training in the overall system of adult education. There are also some more institutions providing vocational training which are not members of KEBÖ, e.g. private groups of trainers, or management institutes. Nevertheless we can give some estimates of the magnitude of the market for the industrial and service sector.[38] The whole number of participation cases in this market can be estimated about 550.000 a year. About two thirds of this market is represented by the training institutions run by the social partners, WIFI and BFI which are clearly dedicated to vocational education and training in the industrial and service sector (the chambers of Commerce and Industry are running the WIFIs, and the employees' organizations are running the BFIs. The following table gives some information about participation and personnel in WIFI and BFI, which indicate the minimum figures for the sector of VET institutions).

[37] The number of participants is unknown because only cases of participation are recorded, many of the participants are taking part more than once. Moreover, about 3.3 M. participations are very short, lasting 1-4 hours only, and single lectures are included in the figures also.

[38] There is also an organization run in the field of agriculture, which shows up high numbers of participation, which are omitted here because of the special conditions in that area.

Table 2: Participation and events in the organizations of vocational education and training (WIFI and BFI)

	Participation (cases)			Education and training events		
	WIFI	BFI	SUM	WIFI	BFI	SUM
1-4 hours	-	1200		-	100	
5-8 hours	80500	2800		4300	200	
9-39 hours	100200	33700		8500	3500	
39+ hours	60200	32600		3700	2500	
Distance t.	-	-		-	-	
Special events	19700	7500		300	400	
SUM	260600	77800	338400	16800	6700	23500

	Personnel	
	WIFI	BFI
employees	445	879
thereof admin.	360	?*
working contracts	7270	5516
thereof admin.	-	?
freemen	-	139
thereof admin.	-	?
SUM	7715	6534
thereof admin.	360	?

* ? = unknown.

8. PERSONNEL IN INTERMEDIARY INSTITUTIONS

Since the early nineties the establishment of “Impuls Centers” (Regional Innovation Centers, Technology Parks, Technology Transfer Centers, etc.) is an important strand of regional development policy, which indirectly contributes to vocational education and training. This policy is focussing on the development of “intermediaries”, and is closely attached to the activities and the support structures in the realm of policies funded under Objective 4 of the European Social Funds (ESF).[39] About 20 institutions of this kind were founded during the last decade, whose objective is the provision of material and immaterial infrastructure for innovative activities in the respective regions.[40]

The personnel working in these institutions is recruited from various bases, an important source are the activities of active labour market policy.

[39] See the action programme concerning the improvement and development of training systems, p.72-77 in the single programming document: Europäischer Sozialfonds, Einheitliches Programmplanungsdokument Ziel 4, 1995-1999, Österreich. Vienna: BMAS (Federal Ministry of Work and Social Affairs).

[40] Cf. OECD (1995) Local Responses to Industrial Restructuring in Austria. Paris: OECD.

3. Examples of VET-programmes

We have argued that the only category of VET-professionals which does have a clear profile in Austria, including the formal definition of its roles and its status as well as the access requirements and training programmes, are the teachers in VET-schools. Up to a high extent, that professional category has to be seen as being the "backbone" of the VET-system as a whole. Therefore the focus of our study has been that group.

The following more detailed description of the existing profiles of VET-teachers shows the high degree of differentiation in that system, which is reflecting the attachment of the various VET-programmes to rather specialized sections of the occupational system, and moreover, a rather hierarchical institutionalization of the various kinds of skills and knowledge taught in VET-schools.

In the CEDEFOP-report about teachers and trainers in Austrian VET the high degree of differentiation among VET-teachers is explicitly posed as one of the most important problems left to be solved, stating that "*.. far-reaching structural reforms of teacher training are still outstanding. (...) the high degree of separateness and lack of permeability among teacher training programmes - and the ensuing loss of integration potential, even between initial and in-service teacher training - are generally considered to be problematic*." (CEDEFOP 1997, 19)

The Austrian post-compulsory VET-system

Types of VET

For a better understanding of the environment, in which the VET-teachers are working, we give a short overall account of the Austrian post-compulsory VET-system. At the upper secondary level, three types of full-time schools are available, which are continuing from grade nine:

⇒ The *Academic secondary schools* are not part of the VET-system. They lead up to final exams entitling their graduates to take up university studies.

The following types build the sector of full-time VET-schools at the post-compulsory level. Frequently schools of those two types giving programmes in certain fields (e.g., business administration) are combined at the same locations. Thus the separation of indivdual schools is stronger by lines of the occupational field, than by the type of hierarchy of credentials:

⇒ *Full-time vocational schools* offer general and vocational education; they lead up to semi-skilled or skilled workers' level depending on the duration of the course.[41]

[41]It should be emphasized that in most cases vocational and technical schools are both parts of a combined institutional context sharing buildings, facilities, teachers and other personnel. In institutional terms, the institutional

⇒ *Technical colleges* offer general education as well as technical theory and practice and lead up to final exams which allow graduates
- to be admitted to university, or
- to take up a professional or semi-professional career.

After year nine full-time compulsory school is finished and students can leave the educational system. At grade ten the

⇒ *apprenticeship system* is added to the post-compulsory VET-system. The *apprenticeship system* is a combination of

- in-company training and
- complementary part-time schooling on a day- or block-release basis. These part-time vocational schools are compulsory for students who own a contract for in-company training. They offer additional training in the chosen occupations or trades but also some general education.

Thus there are two main sectors of the system, apprenticeship on the one hand, and the full-time VET-schools, as sketched above, on the other hand.

At grade nine a separate school, the prevocational year is meant to be the preparatory stage for the apprentices, giving some additional basic education, and providing ocupational orientation and guidance.

Participation

Participation of the 14/15-19-years age group in post-compulsory education and training has increased from about 20 per cent in the mid 1920's to about 80 per cent of the age group in the 1990's. During the four decades from the mid 1920's until the mid 1960's apprenticeship has increased from slightly above 10 per cent to about 30 per cent of the age-group, and full-time

---

distinction in this sector is strongly drawn by occupational fields. In Austria the institutions are labeled by the terms *Berufsbildende mittlere Schulen* ("middle vocational schools" = vocational schools) and *Berufsbildende höhere Schulen* ("higher vocational schools" = technical schools). The translation refers to the hierarchical notion of the meaning of "vocational" vs. "technical". The full-time vocational schools are clearly settled somewhere between apprenticeship and technical schools. In comparison to the apprenticeship system, the credentials of full-time vocational schools provide a higher degree. In comparison to technical schools, then, these institutions provide lesser credentials - a fact true not only in terms of access to higher education, but also in terms of formal qualifications required by trades and industries. The "value" of the qualifications for trades and industries is formally set by the number of entitlements for access to certain occupational categories included in the credentials of a particular study line. This system may be considered as a type of common currency of vocational credentials, with the credentials of the apprenticeship system as the basic unit. Of course, there is a lot of informal valuation of credentials involved in labor market processes which may be in certain respects stronger than one's formal credentials.

schooling has increased from less than 10 per cent to about 20 per cent. During the following three decades apprenticeship grossly leveled off at about 30 per cent, whereas full-time schooling increased form about 20 per cent to about 50 per cent of the age group. Since the early 1970's it was especially the technical-colleges sector which has increased its share. Concerning the development of participation per occupational field in the technical colleges the craft-engineering-production sector and the business sector expanded strongly, especially since 1970. In the vocational schools the business sector was the strongest until 1980, but has declined heavily during the 1980's. The third sector is hotel, catering, tourism. (Table 3)

Table 3: Long-term Participation in VET-Programmes (N x 1,000)*

	Technical and vocational schools (full-time)						
	Craft, engineering production,	Business	Hotel, Catering, Tourism	Agriculture, forestry	Social work Education, Pre-school	Total	*change (%)***
1950	8,7	4,6	3,8	3,1	2,2	22,4	-
1960	8,7	10,5	4,9	4,5	2,9	31,5	*141*
1970	11,8	20,2	8,7	5,5	4,9	51,1	*162*
1980	19,2	26,1	14,6	9,9	8,9	78,7	*154*
1990	20,8	12,9	11,4	10,0	10,0	65,1	*83*
	Technical and vocational colleges (full-time)						
	Craft, engineering production,	Business	Hotel, Catering, Tourism	Agriculture, forestry	Social work Education, Preschool***	Total	*change* (%)*
1950	3,4	3,1	0,5	0,5		7,5	-
1960	10,9	7,9	1,1	1,1		21,0	280
1970	15,4	10,9	3,1	1,4		30,8	147
1980	31,3	31,1	10,7	3,0		76,1	247
1990	46,1	35,5	14,3	3,2		99,1	130

A l l P r o g r a m m e s

	Total VETschools (full time) (Nx 1,000)	*change %**	Academic stream grade 9-12 (Nx 1,000)	*change %**	Apprentices (Nx 1,000)	*change %**
1950	29,9	-	13,8	-	92,9	-
1960	52,5	*176*	30,3	*219*	141,0	*152*
1970	81,9	*156*	57,0	*188*	137,4	*97*
1980	154,8	*189*	75,3	*132*	197,0	*143*
1990	164,2	*106*	62,5	*83*	147,4	*75*

Source: Austrian Report for CEDEFOP and Lassnigg 1995

* Schools for adults are included in the figures

** Number of previous decade = 100

*** because of various changes in this sector no consistent figures are available

Compared to the OECD countries, the education of the population Austria ranges second out of 21 countries with respect to the upper secondary level. About 60 per cent of the 25-65 age

group has completed education at the upper secondary level, which is almost twice the average. However, if we look at the tertiary level, Austria ranges behind.

It should be mentioned that the expansion of the full-time technical colleges during the last decades did not only increase the supply of graduates for the economy, but did also increase the supply of applicants to the university, because the technical colleges are providing access to university also. These programmes have become a second route to university for children from the lower strata of the population, and from rural regions also -- parallel to the first route which have ever been the academic secondary schools. Since the 1990 the number of graduates from the upper secondary schools, who are *entitled* for university access in Austria, are half from the academic secondary schools, and half from full-time technical schools. About 50 per cent of the technical schools' graduates are enrolling at universities; many of them are working beside their studies, and dropping out after a while relying on their previous vocational education.

Programmes

The intensity of instruction in the Austrian system is indicated by table 4. During the first eight years of compulsory school pupils consume 8.960 to 9.000 hours of instruction. The minimal schooling career includes the prevocational year also, and last for 10.340 hours. The range of total instructional hours in the public system is between about 11.340 and about 17.000 hours of instruction.

Table 4: Hours of instruction in different educational pathways

	Total number of instructional hours
Compulsory school, year 1-8	9.000
Comp. + prevocational year	10.340
Comp. + prevoc. year plus part-time vocational school	11.340
Comp. + full-time vocational school	MIN: 12.800 MAX: 15.360
Comp. + full-time technical school	MIN: 14.520 MAX: 17.000
Enterprise part of apprenticeship (3 years)	5.850 MIN: 3.900 MAX: 7.800
Total apprenticeship (3 years)	17.190

We see that the overall public part of apprenticeship is about 11.340 hours totally, including *about 1.000 hours in part-time vocational school* in parallel to training in the enterprise. The time of training in the enterprise is similar to the normal working hours of the labour force minus time in part-time vocational school. The time spent in the enterprise is estimated 1.950 hours per year. It ranges totally between 3.900 and 7.800 hours, depending on the overall duration of apprenticeships (between 2 and four years), most programmes last 3 years, and consume 5.850 hours in the enterprise. If we add this number to the public part, we see that the gross instructional time during an apprenticeship career is rather large, similar to the longest full-time schooling careers. However, the time spent by apprentices in the enterprises is partly productive working time.

Table 5 describes some further characteristics of the programmes in the VOTEC system at the upper secondary level. There are some 350 courses offered, according to different occupational categories within the Austrian initial VET-system at the level of upper secondary education. Despite the official number of different courses is higher, this number gives a fair approximation of the present system. Table 6 gives an overview about the distribution of the courses in six broad occupational fields.

Table 5: Some general characteristics of programmes of Austrian post-compulsory VET

	Full-time technical colleges	Full-time vocational schools	Apprenticeship system
Level of qualification	High	Middle	Low
Formal entitlements provided	University, Trades/ industries	Trades/ industries	Trades/ industries
Main learning site	School-based	School-based	Work-based
Entry requirements	Prior school-performance,	Prior school-performance,	Compulsory school, contract for apprenticeship
Weight of general education elements	Approx. 20 per cent	Approx. 30 per cent	Approx. 4 per cent
Number of courses due to different occupational categories	65	110	170 *
Duration of the program	5 years (6,500-8,000 hours)	3 to 4 years (3,800-6,400 hours)**	2 to 4 years (5,200-9,100 hours) ***
Certification	yes	yes	yes

* This number is due to school curricula; there are more than 200 vocational categories.

** There are also schools in this sector with a one- to two-year duration, but these have been omitted because their value is estimated to be rather small.

*** Sum of time spent at school and on the job; the figures include also the number of hours at grade 9

(1.300) because this is a compulsory part of an apprenticeship career.

In fact the system is highly specialized. If we consider the whole system, the tertiary level included, there are at least 600 different courses, each of them regulated by detailed legal based curricula (Lehrpläne). Broken down by subjects (about 15 per course) whose content is specified for each grade of the courses, we find a very complex system of regulations. On the whole the regulations which indicate the content of the curricula may be estimated on a scale of at least a quarter of a million items, a complexity where oversight is impossible.

In each program, the number of study lines is highest in the technical and craft occupations. This refers to the degree of specialization within this occupational field. *Specialization* in the Austrian context means the degree of differentiation of a broader occupational field according to specialized curricula and credentials.

The apprenticeship programmes are regulated on a dual basis of school curricula and enterprise training curricula. The latter specify a list of tasks which have to be performed during an apprenticeship course, and are mostly formulated in a way that it is easy for small enterprises to apply.

Table 6: Number of courses available by programmes and occupational Fields*

	Technical schools	Vocational schools	Apprentice-ship	*Sum*
Agriculture, forestry, tourism	12	28	13	*53*
Craft, engineering, production	40	45	110	*195*
Business, trade, administration	1	7	11	*19*
Health and social welfare	-	10	6	*16*
Education and training	3	-	-	*3*
Arts and culture	9	20	30	*59*
Sum	*65*	*110*	*170*	*345*

* This table does not refer to post-secondary programmes and institutions which may be seen as part of VOTEC. In the non-university sector of post-secondary education, 55 study lines may be identified: 27 located in the field of education and training, 15 in the field of technical and craft occupations, and 9 in the field of health and welfare (4 are distributed among the remaining categories).

An overview about the various categories of VET-teachers is given in Table 7.

Table 7: Categories of Austrian VET-teachers and their initial training pathways

Type of teacher	Kind of subject	Type of school	Educational background	Training	Subjects
LPA		for all teacher training colleges	study related to the subject	6 years excellent training practice + scientific publication	human-scientific subjects: e.g. Psychology, Sociology, Educational Science etc.
L1	General education subjects	all types of school	study related to the subject	1 year training practice	Maths, English, German, History, etc.
	Business management subjects	Technical and Vocational Education (= TVE) Schools and Colleges	Study "Economic education"	2 years work experience	Business management, accounting, etc.
	Law-civics and economic subjects	TVE Schools and Colleges	study related to the subject	4 years work experience + 2 years In-service teacher training college (PIB) (240 hours training accompanying teaching)	Civics, Economy, Sociology etc.
	Theoretical-vocational subjects	Secondary Colleges for engineering (HTL)	study related to the subject	4 years work experience + 2 years In-service teacher training college (PIB) (240 hours training accompanying teaching)	mechanical engineering, interior furnishing, textile technology, etc.
L2	Theoretical-vocational subjects	Secondary Schools	HTL	2 years work experience + 3 years training [2 years = 240 - 320 hours at PIB or BPA (= Post-Secondary Colleges for the training of Vocational teachers) accompanying teaching plus 1 year fulltime BPA with regular income]	production planing, textile technology, etc.
	Technical-practical subjects	Secondary Schools and colleges for engineering	masters with 6 years experience after examination for journeyman	2 years work experience + 3 years training (2 years = 240 - 320 hours at PIB or BPA accompanying teaching plus 1 year fulltime BPA with regular income)	practical training, laboratory, site engineering etc.
	Domestic subjects	Fashion school Dietetics and household school Tourism school	"Reifeprüfung"-Exam related to the subject	3 years BPA + 1 year work experience afterwards	dietetics, style of home decor, domestic organisation etc.
	Word processing	TVE -Schools and Colleges	I. "Reifeprüfung"-Exam II. "Reifeprüfung"-Exam related to the subject	I. 2 years work experience + 3 years BPA II. 1 year work experience + 3 years BPA	computer supported word processing, shorthand etc.
	Subject group I	Vocational school for apprentices	"Reifeprüfung"-Exam	2 years economic practice + 3 years training (2 years = 240 - 320 hours at PIB or BPA accompanying teaching plus 1 year fulltime BPA with regular income)	Political education, accounting, management etc.
	Subject group II	Vocational school for apprentices	HTL or Masters with 6 years experience after examination for journeyman	2 years economic practice + 3 years Training (2 years = 240 - 320 hours at PIB or BPA accompanying teaching plus 1 year fulltime BPA with regular income)	lessons related to the apprenticeship trade
	Subject group III	Vocational school for apprentices	Masters with 6 years experience after examination for journeyman	2 years economic practice + 3 years training (2 years = 240 - 320 hours at PIB or BPA accompanying teaching plus 1 year fulltime BPA with regular income)	practical work related to the apprenticeship trade

The curricular structure of the training programmes for the teachers at the vocational schools for apprentices are nearly the same as those for the work-shop teachers for the technical-practical subjects at the full-time secondary schools and colleges. The main part of the training consists of the human sciences (40%). Didactics and specialized studies in the taught subject comprise about 25% each, and the importance of the additional studies is rather low (3%).

The structure of the training programmes for the other work-shop teachers (domestic sciences, word processing) is quite different. In place of the human sciences the specialized studies (45-50%) gain in importance, but this can be explained easily as these applicants have as a rule no work experience. A training in the additional studies is even less important (2%).

The teachers for the theorectical-vocational subjects get shorter teacher training courses, which do not include training in the specialized subject studies. It is assumed that those people, who have gained a university degree, and at least four years of work experience, don´t need this kind of education. In place of this field the different kinds of didactics and the additional studies are taught on a larger scale.

VET-TEACHERS TYPE I: Teachers at the part-time vocational schools for apprentices

It is a peculiarity of the Austrian vocational education system that regulatory responsibility for compulsory vocational schools is held by the nine federal states, the *Länder*, whereas technical and vocational schools and colleges are regulated at national level. This means that the latter operate with common curricula, while the former have curricula which are based on the same general guidelines but developed autonomously by the Länder. Teachers of the full-time VET-schools are employed under the responsibility of the Federal Ministry, whereas teachers in compulsory vocational schools are employees of the Länder. The financial management of compulsory vocational education is likewise the responsibility of the federal states.

The compulsory part-time vocational schools which are to be visited by all apprentices for about 1.000 hours provide both basic and specialized education. Their general aim is to promote and complement the appricticeship training provided in business and industry and to enhance the apprentice´s general ecucation. Therefore the subjects on the vocational school are divided into three groups and the admission to these subject groups presuppose the following different training pathways:

(1) Subject group I: General education and business management subjects

This group comprises politics, German and communication, economics and corrospondence, accounting and occupation-related instruction in a foreign language and so on. Teachers aiming for this group must have a „*Reifeprüfung*“-certificate plus at least two years of work experience

in the occopational field concerned. If these conditions are met, the applicant is trained both at the VET-teacher training college (BPA) and the in-service teacher training college (PI). The full course of training lasts three years and ends with a formal examination.

(2) Subject group II: Theorectical-vocational subjects

The provision of theoretical and practical subjects differ depending on the apprenticeship in question.

Teachers of theoretical subjects must hold either a Certificate of Secondary College of Engineering plus at least two years of work experience in the occopational field concerned, or the master craftsmen qualification plus at least six years of work experience in the occopational field concerned. The conditions of training for those teachers are the same as described above.

(3) Subject group III: Technical-practical subjects

Teachers of the practical subjects must either hold the „*Reifeprüfung*"-certificate (concerning the occopational field) plus three years of work experience in the occopational field concerned, or the master craftsmen qualification plus at least six years of work experience in the occopational field concerned, and then they have to undergo the same training as Group I and II.

Curriculum structure of teacher training type I: Teachers at part-time vocational schools compulsory for apprentices teach (as a rule) for the first two years of their education and training at the school, while they are trained part-time at a teacher training college, and subsequently they are trained fulltime for one year.

Within their training programme, which lasts 1560 hours, the subject structure is as follows:[42]

- the human sciences: 580 hours (40%, school practice not included)
- didactics: 380 hours (25%)
- specialized studies: 360 hours (25%)
- additional studies: 40 (3%)

[42] The curriculum of the VET-teacher training courses was classified as follows: I. Human sciences (Religious Education, Educational Science, Teacher Training, Educational Psychology, School Law, Engineers Education, etc.); II: Didactics (Media Research, Technology and Teaching, Professional Training and School Practice); III: Specialized studies in the subject to teach; IV: Additional Studies (School Administration, Rhetorics, etc.)

VET-TEACHERS TYPE II: Work-shop teachers at the full-time vocational and technical schools

A main part of the curricula of the fulltime technical and vocational schools and colleges is the provision of practical vocational training (school workshops, laboratories, kitchens and other practice facilites). There are three different fields of action for VET-Teachers with varied training pathways:

(4) Technical-practical subjects at schools and colleges for engineering

Teachers of these practical subjects must either hold the „*Reifeprüfung*"-certificate (concerning the occopational field) plus three years of work experience in the occopational field concerned, or the master craftsmen qualification plus at least six years of work experience in the occopational field concerned, then they have to undergo the VET-teacher training college (BPA) and the in-service teacher training college (PI). The full course of training lasts three years and ends with a formal examination.

The curriculum structure of teacher training for this group of VET-teachers (4) is nearly the same as the structure for the above group of VET-teachers type I.

(5) Domestic science subjects

Domestic science teachers can teach at secondary schools and colleges for tourism, or for fashion and clothing, which prepare for occupations in the service industries management and administration. They must hold a „Reifeprüfung"-certificate. Then they undergo a three-year course at the VET-teacher training college (BPA) leading to a teaching diploma. Afterwards one year of relevant professional experience is required before a teaching contract can be awarded.[43]

Curriculum structure of teacher training for teachers typ II (5): Teachers of domestic science undergo a three year (fulltime) course at a training college which lasts about 3380 hours (without school practice). The curriculum includes the following distribution of subject categories:

- human sciences: 820 hours (25%)
- didactics: 620 hours (20%)
- specialized studies: 1640 hours (50%)
- additional studies: 60 hours (2%)

[43] Sometimes the chronical order of training and work experience respectively can be changed.

(6) Word processing

Word processing is taught at most upper secondary schools and colleges. Teachers of word processing must have a „Reifeprüfung"-certificate plus at least two years of work experience in the occupational field concerned.[44]

The conditions of training are the same as for the domestic science teachers.

Curriculum structure of teacher training type II (6): Teachers of word processing have to undergo a fulltime three year teacher training which lasts about 2980 hours (without school practice). The subject structure is:

- human sciences: 860 hours (30%)
- didactics: 560 hours (20%)
- specialized studies: 1300 hours (45%)
- additional studies: 60 hours (2%)

VET-TEACHERS TYPE III: Teachers for the theoretical-vocational subjects

Beside the training of general subjects there are four categories of VET-Teachers, who are responsible for the education in the theoretical-vocational subjects:

(7) Theorectical-vocational subjects at the secondary schools

With the exception of this group, every teacher for theoretical suvjects has to ungergo a university training. But as there is a lack of teachers in this group, the following presuppositions fulfill the job requirements: Teachers who teach the theoretical-vocational subjects must hold either a Certificate of Secondary College of Engineering plus at least two years of work experience in the occopational field concerned. Then they have to undergo the same training pathway as the category above: the training college specialized in technical and vocational education and the in-service teacher training college (PI). The full course of training lasts also three years and ends with a formal examination.

(8) Theorectical-vocational subjects at the colleges for engineering

Teachers of theoretical-vocational subjects obtain the specialized qualification for their subject at technical universities, where they are given no specific teacher training. Then they need four years of professional experience. At last they acquire their understanding of teaching by attending the in-service teacher training college (PI) for two years.

---

[44] When the „Reifeprüfung"-certificate is concerned with the occupationel field, the relevant professional experience has only to be one year.

(9) Teachers of civics and economics

Teachers of civics and economics must hold a university degree (Magister) in their subject, and have four years of professional experience. Afterwards they also undergo the in-service teacher training college (PI) for two years.

Curriculum structure of teacher training type III (7)-(9): Teacher training courses for those categories of VET-teachers is comparatively short (240 hours), and is part-time while the teachers are teaching at school. The curriculum does not include classes in the subject taught. The other categories are distributed as follows:

- human sciences: 86 hours (35%)
- didactics: 138 hours (60%)
- specialized studies: no training
- additional studies: 16 hours (5%)

In addition to this structure new programmes for engineering (*Ingenieurpädagogik*) have been introduced, which include a higher proportion of human sciences:

- human sciences: 107 hours (45%)
- didactics: 98 hours (40%)
- specialized studies: no training
- additional studies: 35 hours (15%)

(10) Teachers of business and management

The teachers of the business and management subjects are the only group of VET-teachers, for whom a specialized university course (*Wirtschaftspädagogik*) is provided. training to become a teacher in the vocational and educational field. This course lasts for a minimum of four-and-a-half years (nine semesters) and includes academic and pedagogy studies (education sciene plus pedagogy and methodology in the last five semesters) and two times of teaching practice (three weeks in the first study-section, one semester in the second study-section). Besides the preparation for the teaching profession, the course is also planned as a preparation for employment in personnel management in trade and industry. Employment as a fully-flegded teacher is then possible after two years of experience in a profession relevant to the subjects to be taught.

IN-SERVICE TRAINING OF VET-TEACHERS

The incidence of in-service further education and training of VET-teachers has been observed by Heinz Faßmann (1995, 1995). According to the results incidence of in-service training among VET-teachers is rather high (within 3 years 85.5% of teachers in full-time VET-schools /

92.5% of teachers in part-time VET-schools have participated, 14.5% / 7.5% have not particpated).

Table 7 gives some information about the main providers of training, showing that the main providers of training (PI) are rated a little bit worse than others (especially industries). Future in-service training demand is seen especially concerning an update of subject knowledge, and teachers from industries are clearly preferred by VET-teachers as training instructors in comparison to their own colleagues.

Table 7: In-service training of VET-teachers in Austria

a. Providers of training

PROVIDERS OF TRAINING	teachers at full-time VET-schools	teachers at part-time VET-schools	teachers at full-time VET-schools	teachers at part-time VET-schools
	percentage "yes"		*Mean rating (1=best, 5=worst)*	
In-service training colleges (PI)	80%	89%	2.0	2.0
Enterprises, firms	25%	45%	1.6	1.5
University	13%	9%	1.8	1.8
Other	25%	29%	1.6	1.6

Source: Surveys by Faßmann 1994, 1995

b. Future demands for in-service training by VET-teachers

DEMANDED SUBJECTS OF TRAINING	teachers at full-time VET-schools	teachers at part-time VET-schools
Update of subject knowledge	63%	83%
Didactics	29%	38%
Personality development	28%	
Educational skills	24%	48%
Leadership	18%	38%
Politics, economy, society	13%	39%
Law	11%	32%
Assistance for immigrant pupils	11%	
Counselling	8%	29%
PREFERRED TEACHERS FROM ...		
... the economy	52	68
... unspecified	30	23
... university	27	23
... school, PI, administration	13	10
... school of respondent	4	5

Source: Surveys by Faßmann 1994, 1995

Our analysis of the 1996/7 in-service training supply planned by the Federal PI in Vienna, which serves to some extent other regions also, gives us some further information about the main traits of further education. About 75 per cent of the in-service training supply cover the topic of updating the subject knowledge (50% specialized knowledge, 15% language skills,

10% EDP), the remaining 25 per cent cover issues of personal and educational skills, pedagogy, etc. The trainers are mostly form VET-schools (75%), and from the PI (10%), only a small fraction (15%) are working outside the education system. Concerning target groups, or certain specialized functions, the training supply is specified to a low degree. About 40% is not specified towards a certain type of school, about 40% is designed for teachers in full-time VET-schools, about 20% is designed for teachers in part-time VET-schools. About half of the supply does not give information about specific tasks to supported by the training, the remaining are specified teaching functions, and about 5% of the supply is for special supportive functions, especially for teachers who are responsible for the EDP services. In general, the supply of in-service training serves to a high degree the up-dating of subject knowledge, and supports only to a low degree other roles and functions which are performed by teachers. Concerning the demand of VET-teachers, which was observed in the evaluation survey, the supply structure seem not sufficiently prone to serve the aspects supplementary to the updating of subject knowledge, which was demanded by rather high fractions of teachers. E.g., personality development and teaching skills were demanded by at least one third of teachers, but are provided as one sixth of the supply only.

SOME GENERAL OBSERVATIONS ABOUT THE PROFESSIONAL CATEGORY OF VET-TEACHERS IN AUSTRIA

The highly differentiated and specialized structure of the Austrian post-compulsory VET-system is complemented by a highly differentiated structure of VET-teachers. There are especially two important divisions among the VET-teachers, one is the institutional division between the VET-teachers at part-time schools for apprentices on the one hand (*categories 1-3 in the above description*), and the VET-teachers at full-time schools (*categories 4-10*) on the other hand, the other is the status division between the lower level categories which do not require a university diploma (*categories 1-7*), and the higher level categories requiring a university diploma (*categories 8-10*).

The institutional division implies that the teaching personnel of the part-time VET-schools, which is mainly lower level, is almost totally separated from the teaching personnel of the full-time schools. Moreover, the sector of part-time schools generally has a relative low status in the VET-system, which is additionally challenged by the struggle about the distribution of enterprise training and schooling within apprenticeship.

The widespread requirement for VET-teachers to show up some occupational experience outside school is contributing to a high incidence of additional employment relations outside school, thus reinforcing the identification as an occupational expert rather than as a teacher.

D) Interpretative description of the interview material

1. Research questions

The interviews were based on an outline containing some rather general questions, which were underpinned by a list of more specific issues which should be covered by further questions. For each interview, specific revisions to the list of questions in the general outline were made according to the functions of interview partners, and due to the research process too. The main topics were:

- *the requirements in training of VET-professionals* (brief description of the main tasks in the training of VET-Professionals; change of tasks, shortcomings and possible reforms)

- *further training of VET-professionals* (supply of further training, quality of further training)

- *co-ordination within the VET-Field* (relationship between apprenticeship and other forms of further training in enterprises; co-ordination between education and empoyment, roles of the various partners, e.g., industry, ministry, teacher training colleges, schools, teachers/trainers, in the co-ordination process, defencies in the co-ordination mechanisms, level of co-ordination)

- *demand for innovation in the VET-Field* (innovation centres. exchange of information about innovations)

2. Shortcomings, and issues for reform in the VET-system

In addition to an overall description of the VET-system in Austria form the point of view of VET-professionals working in the system, we were especially interested to discover the main shortcomings in the Austrian VET-System expressed by the experts, to get a better insight in the needs and the possible starting points for reform. As the interview partners mostly belong to the category of „old professionals“, the analysis is concentrated on the more traditional sectors of the VET-system, especially VET-Schools and apprenticeship.

A first general impression is that the VET-professionals hold rather different views, and varied opinions concerning deficiencies in the Austrian VET-Field. There is neither a clearcut list of shortcomings on which most of the experts would aggree, nor have we found common elements of a vision for reform of the system. The second general point which can be remarked at the outset is that there are rather seldom explizit expressions of a demand for new professional qualifications in the traditional sector of the VET-system.

The shortcomings which were expressed during the interviews by some of the VET-professionals may be summarized as follows.[45]

Lack of control and evaluation

One weak point is the lack of control and evaluation in nearly every field of vocational and educational training. This proposition refers not only to teaching at school, but also to training of apprentices, or teaching at university. This problem partly refers to the fact, that most teachers in Austria are in a permanent position, thus possibilties of putting pressure on low-achieving teachers are rather lacking. Recently, some steps have been taken towards the development of a TQM-movement among VET-teachers, which was initiated by the federal ministry, and may be joined voluntarily by individual schools, and teachers. The problem of training quality in the enterprise part of apprenticeship is one of the heavily disputed issues between social partners concerning training policy.

VET-schools too bureaucratic

According to some interview-partners a main problem in the VET-School-system is the bureaucratic structure of the system, which prevents flexible solutions for new challenges. Especially in the following areas the experts claimed more flexibility:

- there is too much bureaucratic work for headmasters, so that they are lacking time to initiate or to foster better relationships of coordination among different partners (especially between school and industry)

- there are too many regulations, which prevent a more flexible cooperation between VET-Schools and industry (e.g., teaching and learning experience performed outside school)

- as the VET-School-system has basically a bureaucratic, and thus conservative structure, there is a certain „unflexibility“ concerning the development of and the participation in innovations. Therefore there are rather hindrances to overcome than incentives in order to employ innovations to fulfil future demands.

Weak co-ordination and communication between company and school in the dual system

Despite its high potential for the development of a fruitful relationship between the world of work and the world of school, a weak point in the dual system remains the lack of coordination between the enterprise training, and the school education. Moreover there is a deep line of

[45] See also the trancribed text-elements from the interviews in the Annex.

conflict concerning several aspects of apprenticeship training between the school teachers on the one hand, and the companies' representatives on the other hand.

Teachers' quality in VET-Schools

Some remarks are concerning the quality of the personnel in VET-Schools. It is meant that quality could be improved by employing more teachers and trainers from industry with a long-time practical experience. Those people would posess up-dated skills and knowledge, and a lot of contacts, which can be useful for initiating more cooperations between school and industry. Therefore it would be necessary to create more incentives for such experts to become a VET-Teacher (propably only on part time basis) as the payment and the status are rather low compared to industry.

Improvement of the public opinion about VET-Teachers

The public opinion about teachers is not the best, because their work is frequently estimated to be a half-day job combined with a lot of holidays. Recently there has been a lot of union bargaining and dispute about the contribution of public servants in general, and teachers too to the improvement of the public budget. On that background, teachers are estimated to be low motivated to do additional work which would be necessary to set up innovative activities, as cooperations with industry, and to translate them into action. Therefore the status and the salary of such „innovative" teachers should be enhanced.

Tensions between „traditionally-orientated" and „innovative" VET-Teachers

„Traditionally-orientated" VET-Teachers feel changes as a danger and as an attack on their system. Moreover, the VET-School-system is meant to favour such a kind of „unflexible" attitudes, as there is no pressure, and also no incentive for teachers to follow new developments in the VET-field. A head teachers of a teacher training college considered that differences concerning their attitudes about innovations (for example, pioneering new kinds of teaching) between the new „innovative" and the "traditionally"-orientated teachers would lead to tensions within this group of VET-Professionals. Therefore a better training of the personality traits should help new teachers to deal with such situations and in the long term to change the whole learning and training environment at VET-Schools respectively.

New forms of remuneration and carrer opportunities for VET-Teachers

This point has already been mentioned. As the salaries for teachers depend on fixed criteria (age and qualification), a flexible administration of payment in accordance with the engagement and initiative of teachers has been impossible. Some interview partners considered that a salary for VET-teachers paid on results, could foster and initiate innovations and a higher level

of cooperation and coordination with industry. This could lead to a different attitude of VET-teachers towards changes and challenges in the occupational area.

Changing roles of VET-Teachers need new forms of teacher training

The globalization of industry, the development of mulitmedia, all these changes highly affected the roles of teachers. Teachers have to realize that they posess no more the monopoly on knowledge, and due to the change of the teacher´s role new forms of teaching have to be implemented and developed. Therefore project work, team work, coaching, and the like become more and more important. Certainly teacher training institutions should already take such developments into account, and prepare prospective teachers for their changed tasks. One important measure mentioned is a better training of the personality.

Merger of the teacher training institutions for VET-teachers

Steps in this direction would include a harmonization of initial training and further training of teachers. VET-teachers have different education pathways and live and work usually in different „worlds“. As the initial education and training for the different kinds of teachers is also located in separated institutions (university, teacher training college, in-service teacher training college) prejudices and tensions within this group of Professionls are reinforced. Therefore a merger of the different teacher training pathways and institutions could probably improve the cooperation of the different VET-Teachers. Additionally, the initial and further training of VET-Teachers could also be better organized and harmonized, as until now it takes also place in different institutions (with the exception of the teachers for the theoretical-vocational subjects).

Additional individual remarks

The following points, expressed by the interview partners, are more or less individual remarks:

⇒ *Reaction to changing contents of subjects in VET-Schools*: As the contents of subjects are changing rapidly, the occupational profiles would have to be broadened.

⇒ *Shaping the enterprise practice by the VET-Schools*: VET-Schools should not just adapt to new developents from industry, but they should be able also try to initiate innovations.

⇒ The *quality of the further training courses for VET-Teachers* should be improved in order to employ better teaching personnel

⇒ More emphasis should be given *to basic general education* as a basis for a lifelong learning

⇒ The *pedagogical training* for the teachers giving the theoretical-vocational subjects at secondary technical and vocational colleges should be improved

⇒ *New forms of teaching* should be implemented in VET-schools (coaching etc.)

⇒ More *co-operation between VET-schools and their graduates*, could improve the whole education process, and help to initiate contacts between schools and enterprises

⇒ The trainers in companies have too few time to train their apprentices, as they have to perform a lot of work which has nothing to do with the training of apprentices (this point has already been mentioned above)

⇒ Sometimes, the social partner system is more of a hindrance than a help. For example, the development of new apprenticeship trades would require more flexible patterns to fulfill the challenges of structural and technical change.

E) Summary of the professionalism of Vet

Roles of VET-professionals

Summarizing the division of labour among the professionals we have a separation of the following categories:

1. Different kinds of *VET-teachers*, who are clearly separated by different education pathways, and in addition are not normally doing research. (Especially three kinds of VET-teachers may be distinguished between, who are different concerning education and status: (1) teachers at the part-time vocational schools compulsory for apprentices; (2) work-shop teachers at the full-time vocational and technical schools; (3) teachers for the theoretical-vocational subjects, e.g. in business or engineering).

2. *Trainers for apprenticeship in enterprises*, who in the past did not have any training concerning their educational functions, and now have only a small amount of training;

3. Teaching personnel in the institutions for initial and continuous *VET-teacher education and training*;

4. *Decision makers* who are responsible for changes in the system: Administrators, politicians, and representatives of the social partners (lobbyists);

5. *VET-Researchers*, who are mostly outside the academic system, affiliated to small and young institutions, some of them linked to the social partners, and who compet on a market for research contracts;

6. *Human resource development personnel* in many small counselling firms, and in large enterprises;

7. *Personnel in adult and further education*, who mainly do their work part-time on a free-lance basis.

8. *Personnel in intermediary institutions*, who provide various mixes of services, and whose function mainly is networking between the various involved actors and institutions.

These categories of VET-professionals in general live and work in different “worlds”, lacking co-operation, and sometimes even acting against each other. As an example, there are deep lines of conflict between the various actors and institutions involved in the apprenticeship system. One is between the representatives and experts of the main social partners, employees on the one hand and employers on the other hand. A second divide exists between the public part of

the system and the enterprise part of the system, involving the school teachers and the trainers in enterprises as well as the administrators and political decision makers. In addition, the trainers in enterprises, who are perhaps the most widespread category of VET-professionals, and who are obviously at the centre of the vocational training system, are mostly not perceived as VET-professionals, because they are doing their training work part time, besides their "normal job" -- maybe, they do not even feel as training professionals themselves. Another divide is between schools for young people on the one hand and adult education on the other hand. In this area a highly bureaucratic system gets in touch with a mainly market oriented system. Consequently, there are all kinds of well-known prejudices, which are sometimes even exaggerated in the public debate. Some groups within adult education are pressing for a legal basis, including more security and predictability for the system. This position is heavily challenged by the people of the "market fraction", who fear more bureaucracy and rising costs for public budgets.

Concerning a distinction of "old" and "new" VET-professionals, we may refer to development of the institutional framework in time and to an assessment of functions or roles. The positions (1) to (5) of the above list of professional categories in the VET-system are more or less synonymous to occupations as well as to functions or roles: teachers, trainers, different kinds of decision makers (administrators, politicians, lobbyists), researchers. The remaining positions (6) to (8) are diffuse categories, defined by the institutional context to which the professionals are attached.

A brief discussion of functions or roles performed by professionals may give us a clearer picture. The taxonomy of roles and functions developed by the American Society for Training and Development (ASTD) can be taken as point of departure. Odenthal/Nijhof (1996) have performed an empirical study among German HRD-practicians, and we present the **list of HRD-roles** as it appeared in the German study (Odenthal/Nijhof 1996, 68):

Common roles (*performed by 54-97% of respondents in the professional categories*)

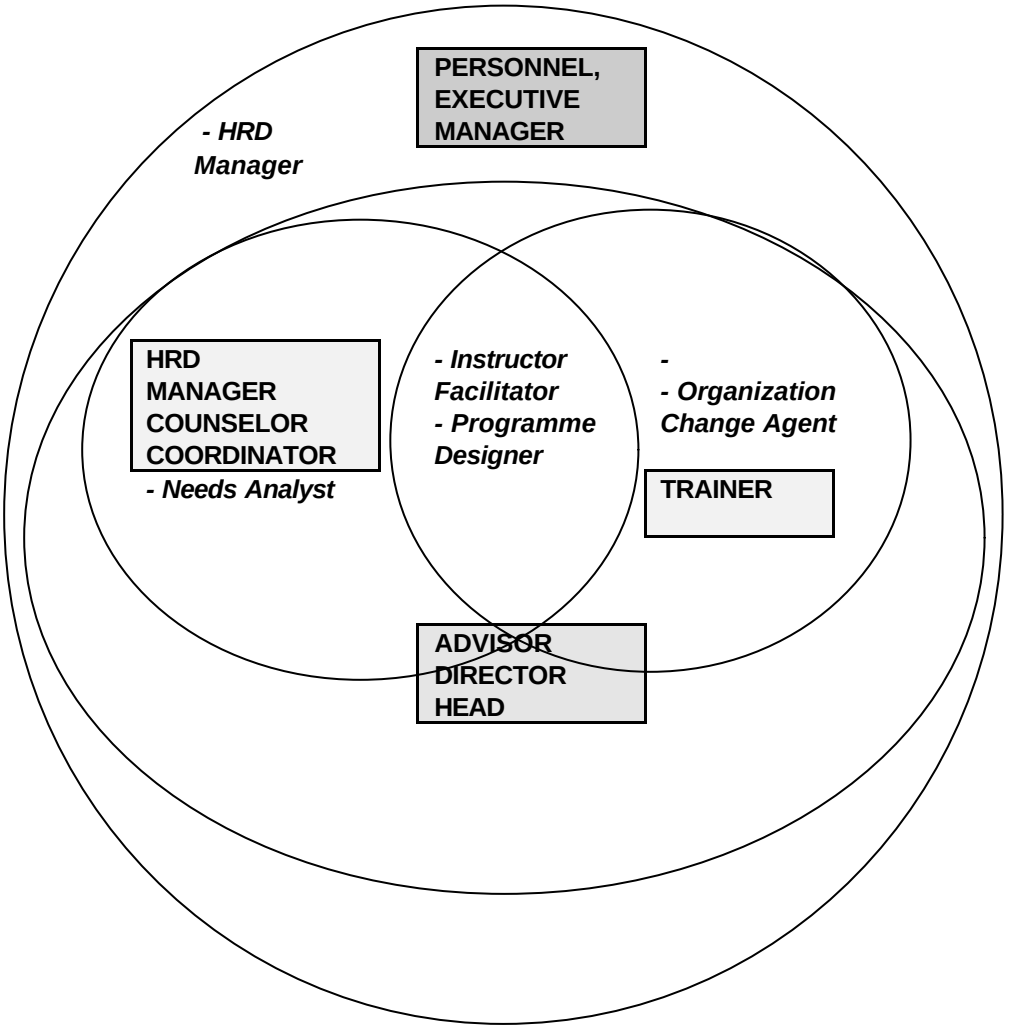
- Instructor/Facilitator
- Programme Designer
- Organization Change Agent
- Needs Analyst

Specialized roles (*performed by 6-32% of respondents in the professional categories*)

- HRD Materials Developer
- Marketer
- Individual Career Development Advisor
- Evaluator
- HRD Manager
- Researcher
- Administrator

A closer analysis of the empirical distribution of roles among the German HRD-practicians gives a rather simple picture (Figure 1). We see four overlapping types of job positions which have very similar patterns of role distributions: Trainers (41%), HRD-Managers, Counselors-Coordinaters (20%), Advisors, Directors-Heads (26%), Personnel or Executive Managers (4%). In all these positions the roles of *instruction/facilitation* and *programme design* are performed by high proportions of practicians (with few exceptions more than 2/3 of respondents), we may term these the core functions. Trainers additionally perform the role of *organization change agents*, whereas HRD-Managers and Counselors-Coordinators more frequently perform *needs analysis* in addition to the core functions. Advisors and Directors-Heads perform *all these roles* (the small group of Personnel or Executive Managers additionally perform the role of the HRD-manager, which seems rather redundant).

Figure 1: HRD Roles and self-reported job positions of German HRD-Personnel



Source: Odenthal/Nijhof 1996, 69, Tab. 4.23 (Design of Figure by the Author)

We do not have representative empirical evidence about Austria, but our research indicates that the profiles in HRD are probably similar to the German picture. The personnel in adult education performs mostly teaching functions and is frequently involved in programme development, the other functions are concentrated on a very small group. The last category of professionals, the personnel in intermediary institutions probably concentrates on the roles of change agents, needs analysis and the more specialized functions (marketer, evaluator), and perhaps programme design.

Concluding the first description of professional profiles attached to the VET-system a stylized, and largely hypothetical picture is presented in Figure 2. The distinction between “old” and “new” professionals is drawn along the institutional divide between the actors running the formalized initial VET-system on the one hand, and the less formalized growing institutional contexts of HRD, further education, and intermediaries on the other. VET-research, which mostly originated in the seventies, although it is an old function in principle, has to be classified rather among the “new” professional categories. Going through the pattern of roles and functions among the various categories, we may summarize the following traits:

-- On the side of the “old” professionals we see a rather clear-cut division of labour between the professional categories: teachers teach, researchers do research, administrators and managers run the system, including most part of the developmental work, and the politicians and lobbyists assess the needs and selling their ideas.

-- On the side of the “new” professionals we can see two interesting patterns: The first is that the roles are overlapping and scattered to a higher degree, meaning that there seems to be a less clear cut division of labour; second, there are similarities between certain “new” patterns and certain “old” patterns: teachers and personnel in further education; HRD-personnel and administrators-mangers, however with the important exception that in that category teaching and the other functions are merged; intermediary personnel and politicians-lobbyists.

Figure 2: Stylized pattern of roles and professional categories in Austrian VET

	"OLD" PROFESSIONALS				"NEW" PROF.		
	Teachers Trainers	Adminstr. Managers	Politicians Lobbyists	Researchers	Other Institutions*		
					HRD	F-E	INT
Common roles							
Instructor/Facilitator	xxxxx	x			xxx	xxx	
Programme Designer	xx	xxxxx	xx		xxx	xx	x
Organization Change Agent		xxxxx	xx	(x)	xxx		xxx
Needs Analyst		xxxxx	xxxxx	xx	xxx	x	xxx
Specialized roles							
(HRD) Materials Developer	(x)	xx			x	x	
Marketer		(x)	xxxxx		x	x	xxx
Individual Career Development Advisor	x				x		
Evaluator (Inspector)		xxxxx	xxx	xx	x	x	xxx
HRD Manager		xx			x		
Researcher				xxxxx	x		
Administrator	x	xxxxx			x	x	

* Personnel in HRD, further education (F-E), intermediary institutions (INT).

The observed pattern, which has to be elaborated by further research, deserves some comments. The administrators-managers seem to have a rather complex role profile concentrating several very important strategic functions in their domain. This is obviously in accordance with the bureaucratic structure of the system. The institutional context of the "new" professions is less bureaucratic, and allows for a more complex profile which is necessary for acting in a more flexible environment. The combination of teaching with the more "deliberative" functions of development and planning may urge us to ask whether it will be appropriate to develop a similar combination among the "old" professionals. Research in the EUROPROF project points to different experience in different countries. In Finland a strategy of broadening the teachers' responsibilities has taken place, however this process apparantly has not brought about very positive results. Anja Heikinnen (1996, 11) cites a teacher who complains "... *it seems that teaching has become peripheral*".[46] On the other hand the study about the teachers in the Netherlands shows that teachers perform non-teaching duties to a high degree, and that they also view this development positively. *"A large degree of willingness to make secondary education more professional is evident from teachers' replies to questionnaire items on non-teaching activities. Most would like to work more closely with their colleagues and local industry and take the needs of individuals and groups of students more into account. There is*

[46] Heikinnen, A. (1996) Vocational Education as a "life project"? Reflections from the case of Finland. EUROPROF Research paper. University of Tampere.

also broad support for in-service training as well as participationg in new development projects."(Stoel/Streumer 1996, 16) On the other hand it is mentioned that "... *most teachers teach traditionally*"(ibid., 16).[47]

The role of research

In our discussion of the division of labour among the "professional" profiles in the Austrian VET-system, we have pointed to a marked separation between VET-practice and VET-research. This observation has been strongly reinforced in our field work. The representatives of the VET-system frequently could not even imagine what research could potentially contribute to their problem-solving activities. The situation which is described by Michael Eraut (1994) of a split between knowlege and making use of that knowledge in practice seems strongly to be present in Austrian VET. As the OECD[48] and several others have argued, this seems not to be a specifity of Austrian VET, we will however have a short look at the specific conditions in that area.

Concerning the role of research and the aspect of change in the Austrian system, the situation somewhat exaggerating two points could be made:

- "Nothing fails like success": The Austrian system is considered to be heavily resistant against change because of its success in the past,
- and if there is some change, it goes on mostly without research.

On the other hand there are obviously pressures for change which are not met sufficiently. Moreover, heavy points are made that the system is not even able to adapt to the new challenges of globalization, structural and technological change, etc. Some examples, as to where change is perceived necessary, are the following issues:

⇒ Successful orientation and guidance for students;
⇒ Development of new occupations, whereas the system is tied to traditional occupations;
⇒ Reaction to changing occupations, e.g. broadening occupational profiles;
⇒ Provision of a sufficient basic general education as a basis for lifelong learning;
⇒ Implementation of new technology in the apprenticeship trades;
⇒ Development of a new concept of initial education as a starting point for lifelong learning.

Why does research not sufficiently contribute to development and change, whether reactive or proactive? No full answer can be given here, however, the paper provides some considerations which may serve as a basis for further discussion. Especially two factors seem to be crucial for research and change in the Austrian system, the first being the division of labour among the "old" professionals, and the second being the institutional structure.

---

[47] Stoel, W.G.R. & J.N. Streumer (1996) The changing role of teachers in secondary vocational education. EUROPROF Research paper. University of Twente.
[48] OECD (1995) Educational research and development. Trends, issues, challenges. OECD: Paris.

The problems involved in the division of labour have already been discussed, therefore we have a look now at the *institutional structure*. The division of labour reflects the basic structure of the system, which may shortly be summarized by the following aspects:

- Different tracks (full-time technical and vocational schools on the one hand and apprenticeship and part-time schools on the other) are located in separated institutions;

- Within these institutions there is a high number of highly specialised courses, some 100 in full-time schools, and more than 200 in apprenticeship;

- All the courses are centrally, and in apprenticeship also regionally, regulated by law, including painstaking details of curricula, time-tables, etc.;

- Therefore the radius of action of teachers is very limited to their actions within the classroom, whereas decision making is located on a centralised, political level;

- The companies providing apprenticeship training only have to meet some minimal requirements, and their radius of action is much bigger compared to that of teachers;

- However, the trainers in companies in most cases perform their educational responsibilities besides their “normal” work (most companies actually only have one or two apprentices);

- Teachers in vocational education, especially those providing the practical subjects, have low status compared to the other teachers (there are separate teacher training institutions for the practical subjects, mostly on a part-time basis).

Research in vocational education is provided mostly as contractual research by institutions affiliated to the social partners, and it was mostly founded by the labour market authorities. This means that research about vocational education and training is not located in universities, and not in teacher training institutions.

Figure 3: Institutional features of practice and research in Austrian vocational education

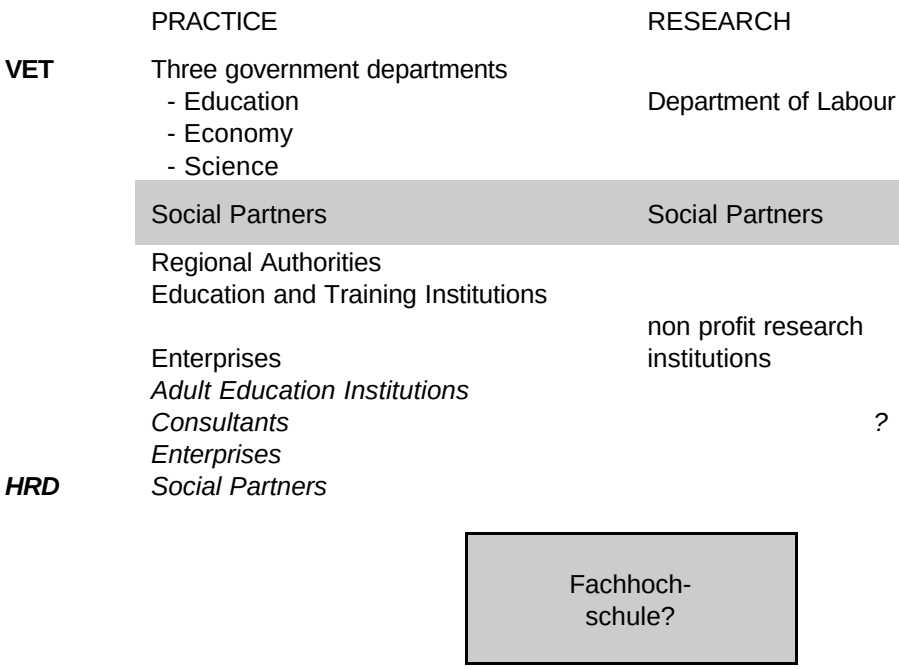


Figure 3 shows that there is a very scattered institutional structure of practice and research in VET and HRD:

- The practicians and teachers are not involved in research,
- the institutions which are responsible for decision making are hardly doing or commissioning research,
- research is mostly commissioned by the labour market authorities which do have any say in educational matters.

An analysis of research topics in Austrian VET research (Lassnigg/Pechar 1994)[49] shows that most of the fields are covered very poorly by research. Most resources are used for *monitoring of the labour market* and the *production of information materials* about the education and training institutions and the respective occupational profiles. The other topics which are of central concern in Austrian VET research, features of the apprenticeship system, further education, and evaluation and reform of educational profiles are dealt with very superficially.

[49] Lassnigg, L. & H. Pechar (1994) Bildungsforschung in Österreich. Österreichischer Länderbericht zum 3. Internationalen OECD-Seminar zur Bildungsforschung und Entwicklung. Vienna: Mimeo.

We can easily show that changes and reforms in the apprenticeship system were run without a sufficient research base; in the fields of further education, as well as concerning effects of schooling, or financial aspects, not even the most basic information is available.

The location of the “Fachhochschule” shall indicate that the new institutional framework is cross-cutting the various segmentation lines, thus potentially being an institutional basis for the integration of the various functions.

F) Evaluation of the bases of the Europrof-project by means of the expert interviews

A first general conclusion concerning the bases of the Europrof-project seems to be that the analysis of the situation, concerning especially the fragmented structure of the VET-system, and the pressures of change on the system is hold to be true by the experts on the one hand – on the other hand, however, the proposed solution of overcoming at least some of the problems by the development and implementation of a new professional profile via a university course for VET-professionals has been more or less clearly rejected by the experts in the Austrian VET-community.

A rather strong impression during our research has been a divide between the “old” VET-professionals (especially the VET-teachers and administrators) and the “new” VET-professionals (HRD-personnel, consultants, etc.). The strong and traditional VET-system seems to be separated from its environment on the aggregate organizational level, but on the micro level of individual relationships of the teachers, there are frequently close contacts occuring to the economy. This implies that change and innovation in the environment is reflected to some degree in the activities in the VET-system.

Concerning the capacity of the VET-system to innovate, rather conflicting view have been observed. People from “inside” the system are rather optimistic, whereas people from “ouside” hold rather critical views concerning the innovative capacities. The tight and bureaucratic overall regulation of the VET-system is seen as an obstacle to change and innovation. However, this may be to some extent an overestimation of the power of the bureaucratic mechanisms.

One of the outstanding results has been the strong notion by VET-institutions of keeping up in pace with change and innovation in the environment. In the sector of full-time VET-schools there is a marked fear of “lagging behind” the outside world, so that there seems to be a continuing struggle which possibly cannot be won. In the sector of apprenticeship the argument has been put forward that change and innovation would flow to the training process more automatically, because training takes place in the enterprise which is meant to be the locus of innovation. The idea of shaping the world of work by the processes in the VET-system, and initiated by VET-professionals is very much alien to the system.

The VET-teachers and trainers, who mostly are practicians from the occupations getting their teacher education and training as a second qualification, do frequently not identify themselves as VET-professionals. The other kinds of VET-professionals, HRD-personnel, trainers and teachers in adult education, VET-researchers, and the like, are almost completely lacking a professional infrastructure. Therefore there is a low degree of professionalization in those areas. The newly established framework of *Fachhochschulen* has been built on the basis of a

professional organization model. However, it turned out to be difficult to find the professional expertise necessary for the development of the new institutions.

Because of the strong bureaucratic and politicized character of the exisiting VET-system, the idea of setting up a new formal comprehansive curriculum for the education and training of new VET-professionals is mostly seen critically. Rather the development of a supply of specific qualifications, and especially the development of networking activities and networking structures is seen as an appropriate path for development. A regionally dispersed structure of impulse centers, frequently in combination or co-operation with a *Fachhochschule*, which has been started to be built up during the last years, seems to be an important element for the development of a professional structure in the field of VET-activities.

An important obstacle is the lack of a research base, and also the lack of a systematic development agency for the area of the VET-system. The education and training of VET-teachers for business and management, which is situated in the university, gives positive signs for being possibly a better basis for the development of R&D in the VET area than the other forms of VET-teacher education and training. However, the links to the field of practical experience are missing in that area.

G) Conclusions, comments and recommendations

The Europrof-project has been an important step to look more closely at the questions of the development of VET-professionals in Austria. Because such steps have not been made oftenly until now, much is left to be done.

We were rather able to give some first comprehensive insights, and to make some first steps to bring the Europrof ideas to the people in the VET-system, than to find solutions for the development of VET professionalism in Austria.

Our general contention is that the state and development of professionalism in the VET system is connected to the overall co-ordination mechanisms in the system. The existing structure, which is a complex and contradictory combination of a bureaucracy with market mechanisms, rather inhibits than reinforces professionalism. Especially the weakness of research and development in the VET-system is a factor which inhibits professionalism. A second factor is the high degree of differentiation and fragmentation within the overall VET-system, and the lack of a nucleus for a comprehensive professional community, which may overcome the isolation of the various categories of VET-professionals.

The weakness of research and development especially means that development strategies are rather worked out in the political and administrative community than in the non-existent professional communitiy. Given that situation, a starting point for the implementation of a comprehensive programme for the initial education of VET-professionals cannot easily be found.

In addition to steps for the development of VET research and development, the perspectives for the future development of stronger profiles of VET-professionals may be seen in the following areas:

- Within the *Fachhochschule* framework different categories of VET-professionals are working together, and there is also a given requirement for the development of professional research and development in this sector. Recently some first steps have been taken to implement human resource development for the personnel working in this context.

- A second area may be the development of *communities of practice* which take the existing links at the borders of the different sectors of the VET-system as a starting point, to develop co-operation (e.g., HRD-practice and apprenticeship, or trainers and teachers)

- A third area may be the development of a professional community in the sector of adult education.

Literature

Altrichter, H. & P.Posch (1994) Lehrer erforschen ihren Unterricht - Eine Einführung in die Methoden der Aktionsforschung, Bad Heilbrunn: Klinkhardt.

Altrichter, H., Ed. (1996) Mikropolitik der Schulentwicklung. Innsbruck/Wien: Studienverlag.

Altrichter, H., P.Posch & B. Somekh (1993) Teachers investigate their work : an introduction to the methods of action research. London: Routledge.

Archer, M.S. (1979) Social origins of educational systems, London & Beverly Hills: Sage

BMUK (Federal Ministry of Education and Cultural Affairs, Ed.) (1996), Neues Lernen für die Gesellschaft von morgen. Zukunftsforum VI. Innsbruck: StudienVerlag; Koller, E. & E. Burda-Buchner (1996), Neue Wege in der beruflichen Aus- und Weiterbildung. ZSE-report Nr.17. Vienna: Zentrum für Schulentwicklung.

BMUK (Federal Ministry of Education and Cultural Affairs, Ed.), Entwicklungsgrundlagen für das österreichische Schulwesen. Vienna (manuscript).

BMWF & BMUK (1992), Diversification of Higher Education in Austria. Background Report submitted to the OECD, Vienna.

Boos, F. & B.Heitger (1993) Modernes Personalmanagement und arbeitemarktpolitische Konsequenzen. Research report. Vienna: Bundesarbeitskammer (Chamber of Labour).

CEDEFOP (1997), Teachers and trainers in vocational education and training. Vol.3. Luxembourg: Office for Official Publications of the European Communities.

Europäischer Sozialfonds, Einheitliches Programmplanungsdokument Ziel 4, 1995-1999, Österreich. Vienna: BMAS (Federal Ministry of Work and Social Affairs).

European Commission (1996) White paper on education and training. Teaching and learning – Towards the learning society. Luxembourg: Office for Official Publications of the European Communities; for the response by the Council of Ministers see Amtsblatt der Europäischen Gemeinschaften, 6.7.1996, Nr. C 195/2.

Faßmann, H. (1994), Lernen Lehrer? Eine empirische Erhebung über das Ausmaß der Lehrerweiterbildung im berufsbildenden mittleren und höheren Schulbereich. Resarch report commissioned by the Federal Ministry of Education and Cultural Affairs. Vienna (manuscript).

Faßmann, H. (1995), Fortbildungsverhalten von Berufschullehrern. Resarch report commissioned by the Federal Ministry of Education and Cultural Affairs. Vienna (manuscript)

Frances, J. et al. (1991) Introduction, in Thompson et al. (1991)

Gerstbauer, G. (1997), “Reform der Lehrlingsausbildung” in *Die Nachqualifizierung von Jugendlichen und Erwachsenen* ed. by F. Lechner, W.Reiter & W.Schlegel. Forschungsberichte aus Sozial- und Arbeitsmarktpolitik No.61. Vienna: Federal Ministry of Labour, Health, and Social Affairs, 267-269.

Gittenberger, S. (1997), “Maßnahmenkatalog zur Reform der Lehrlingsausbildung.” *Recht der Wirtschaft*, No.4, 210-11.

Gruschka, A. (1994), New approaches to integrated learning, Paris: OECD, DEELSA/ED/WD(94)35 (mimeo).

Heikinnen, A. (1996) Vocational Education as a “life project”? Reflections from the case of Finland. EUROPROF Research paper. University of Tampere.

K.Schedler (1997), “Innovative Impulse für die Lehrlingsausbildung - Ein Anstoß zur Diskussion.” *ibw-Mitteilungen*, No.3 (March), 8-12.

Kanelutti, E. (1996), Bildungsberatung, -information und -datenbanken in Österreich. In: BMUK (Ed.), Statements zur Enquete “Neue Wege in der beruflichen Aus- und Weiterbildung”. Vienna (mimeo.)

Kramarsch, M. (1995), Training ‘95/96. Das Handbuch zur beruflichen Aus- und Weiterbildung. Vienna: Signum.

Lassnigg, L. & H. Pechar (1994) Bildungsforschung in Österreich. Österreichischer Länderbericht zum 3. Internationalen OECD-Seminar zur Bildungsforschung und Entwicklung. Vienna: Mimeo.

Lassnigg, L. & Steiner, P. (1997), Die betrieblichen Kosten der Lehrlingsausbildung. Materialien zu Wirtschaft und Gesellschaft Nr.67. Vienna: AK-Wien.

Lassnigg, L. & W.Pollan (1996) Das österreichische Qualifizierungssystem im internationalen Vergleich. Ein Überblick. WIFO-Monatsberichte (No.12), 763-780.

Lassnigg, L. (1997), “Megatrends” in Demografie und Arbeitswelt - Entwicklungslinien in Österreich und bildungspolitische Konsequenzen. Entwurf, Ergebnisse des Workshop im BMUK. Vienna (manuscript).

Lenz, W. (1996), Situation und Perspektiven österreichischer Erwachsenenbildung. Ch. 2.5 in: BMUK (Federal Ministry of Education and Cultural Affairs, Ed.), Entwicklungsgrundlagen für das österreichische Schulwesen. Vienna (manuscript).

Lenz, W. (1997), Positionspapier zur österreichischen Erwachsenenbildung. Contribution to the high level group at the Federal Ministry of Education and Cultural Affairs: “Megatrends” in Demografie und Arbeitswelt. Vienna (manuscript).

Meuser, M. & U.Nagel (1991), ExpertInneninterviews - vielfach erprobt, wenig bedacht. In: Garz, D. & Kraimer, K. (Eds.), Qualitativ-empirische Sozialforschung. Opladen, Westdeutscher Verlag, 441-471.

Meuser, M. & U.Nagel (1996), Vom Nutzen der Expertise. In: Voges, W. (Ed.), Kommunale Sozialberichterstattung. Leske & Budrich.

Odenthal, L. & W.J.Nijhof (1996) HRD Roles in Germany. Studies in Human Resource Development. DeLier: Academisch Boeken Centrum/ Universiteit Twente.

OECD (1995) Educational research and development. Trends, issues, challenges. OECD: Paris.

OECD (1995) Local Responses to Industrial Restructuring in Austria. Paris: OECD.

ÖIR (Austrian Institute for Regional Planning) (1997), Die regionalpolitische Relevanz von Impulszentren in Österreich, research report. Vienna (manuscript).

Ouchi, W.G. (1980) Markets, bureaucracies and clans, Administrative Science Quarterly, Vol. 25, p. 129-141

Posch, P. & H. Altrichter et al. (1992) Schulautonomie in Österreich. Bildungsforschung des BMUK Nr. 1. Wien.

Stoel, W.G.R. & J.N. Streumer (1996) The changing role of teachers in secondary vocational education. EUROPROF Research paper. University of Twente.

Thompson G. et al. (1991), Markets, hierarchies and networks. The coordination of social life, London: Sage & Open University Press.

Thompson, G. (1991) Comparison between models. Introduction, in Thompson et al. (1991).

Weick, K.E. (1976) Educational Organizations as Loosely Coupled Systems. Administrative Science Quarterly 21 (March), 1-19.

Annex (Interview-Documents)

A) Background 1

1. Fields of action within Vocational Education and Training.....1

THE SYSTEM OF INITIAL VET 1

FURTHER EDUCATION AND HUMAN RESOURCE DEVELOPMENT (HRD).....3

CHANGE AND INNOVATION IN THE SYSTEM.....7

REFORM AND NON-REFORM IN THE AUSTRIAN SYSTEM: TWO CASES.....13

2. Vet-Professionals.....19

B) Research Design.....20

1. Materials and analyses describing VET-Professionals.....21

2. Expert interviews 22

3. Surveys 23

C) Results.....24

1. Vet-Professionals in different fields of action 24

2. Training pathways for VET-professionals 25

1. VET-TEACHERS.....25

2. TRAINERS FOR APPRENTICESHIP IN ENTERPRISES.....28

3. TEACHING PERSONNEL IN THE INSTITUTIONS FOR VET-TEACHER EDUCATION AND TRAINING.....29

4. DECISION MAKERS 30

5. VET-RESEARCHERS 31

6. HUMAN RESOURCE DEVELOPMENT PERSONNEL.....32

7 .PERSONNEL IN ADULT AND FURTHER EDUCATION 32

8. PERSONNEL IN INTERMEDIARY INSTITUTIONS 34

3. Examples of VET-programmes 35

THE AUSTRIAN POST-COMPULSORY VET-SYSTEM 35

VET-TEACHERS TYPE I: Teachers at the part-time vocational schools for apprentices .. 42

VET-TEACHERS TYPE II: Work-shop teachers at the full-time vocational and technical schools 44

VET-TEACHERS TYPE III: Teachers for the theoretical-vocational subjects 45

IN-SERVICE TRAINING OF VET-TEACHERS 46

SOME GENERAL OBSERVATIONS ABOUT THE PROFESSIONAL CATEGORY OF VET-TEACHERS IN AUSTRIA 48

D) Interpretative description of the interview material 49

1. Research questions 49

2. Shortcomings, and issues for reform in the VET-system 49

E) Summary of the professionalism of Vet 54

Roles of VET-professionals 54

The role of research 59

F) Evaluation of the bases of the Europrof-project by means of the expert interviews 63

G) Conclusions, comments and recommendations 65

Literature 66

Table 1: Rough numbers of VET teachers (head counts)..... 27

Table 2: Participation and events in the organizations of vocational education and training (WIFI and BFI)..... 34

Table 3: Long-term Participation in VET-Programmes (N x 1,000)*..... 37

Table 4: Hours of instruction in different educational pathways..... 38

Table 5: Some general characteristics of programmes of Austrian post-compulsory VET..... 39

Table 6: Number of courses available by programmes and occupational Fields*..... 40

Table 7: Categories of Austrian VET-teachers, and their initial training pathways**Error! Bookmark not defined.**

Table 8: In-service training of VET-teachers in Austria..... 47

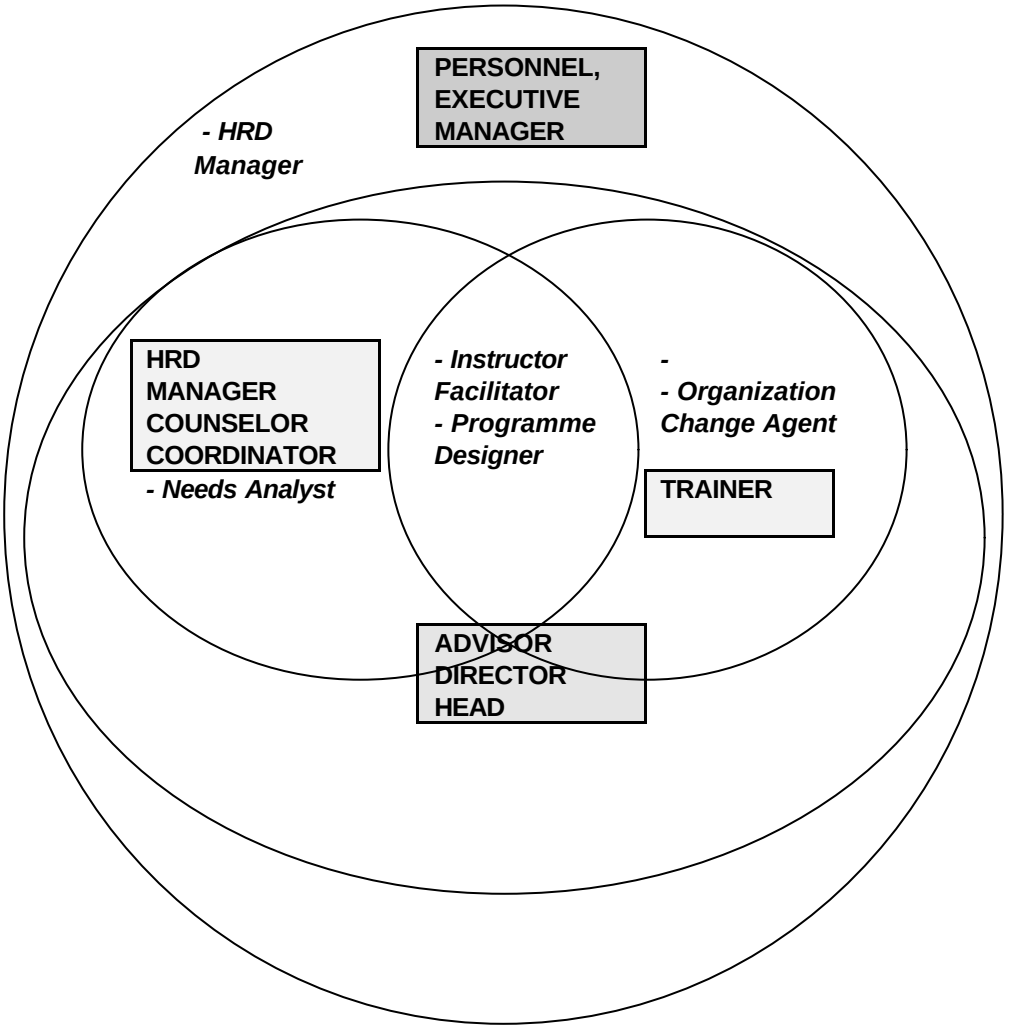
Figure 1: HRD Roles and self-reported job postions of German HRD-Personnel 56

Figure 2: Stylized pattern of roles and professional categories in Austrian VET**Error! Bookmark not defined.**

Figure 3: Institutional features of practice and research in Austrian vocational education..... 61

Figures

Figure 1: HRD Roles and self-reported job positions of German HRD-Personnel



Source: Odenthal/Nijhof 1996, 69, Tab. 4.23 (Design of Figure by the Author)

Figure 2: Stylized pattern of roles and professional categories in Austrian VET

	"OLD" PROFESSIONALS			"NEW" PROF.			
	Teachers Trainers	Adminstr. Managers	Politicians Lobbyists	Researchers	Other Institutions*		
					HRD	F-E	INT
Common roles							
Instructor/Facilitator	xxxxx	x			xxx	xxx	
Programme Designer	xx	xxxxx	xx		xxx	xx	x
Organization Change Agent		xxxxx	xx	(x)	xxx		xxx
Needs Analyst		xxxxx	xxxxx	xx	xxx	x	xxx
Specialized roles							
(HRD) Materials Developer	(x)	xx			x	x	
Marketer		(x)	xxxxx		x	x	xxx
Individual Career Development Advisor	x				x		
Evaluator (Inspector)		xxxxx	xxx	xx	x	x	xxx
HRD Manager		xx			x		
Researcher				xxxxx	x		
Administrator	x	xxxxx			x	x	

* Personnel in HRD, further education (F-E), intermediary institutions (INT).

Figure 3: Institutional features of practice and research in Austrian vocational education

	PRACTICE	RESEARCH
VET	Three government departments	
	- Education	Department of Labour
	- Economy	
	- Science	
	Social Partners	Social Partners
	Regional Authorities	
	Education and Training Institutions	
		non profit research
	Enterprises	institutions
	Adult Education Institutions	
	Consultants	*?*
	Enterprises	
HRD	*Social Partners*	

Fachhoch-
schule?