

IHS Sociological Series
Working Paper 40
March 2000

"Old" and "New" Professionals in Austrian Vocational Education

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INSTITUT FÜR HÖHERE STUDIEN
INSTITUTE FOR ADVANCED STUDIES
Vienna

Impressum

Author(s):

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Title:

"Old" and "New" Professionals in Austrian Vocational Education

ISSN: Unspecified

2000 Institut für Höhere Studien - Institute for Advanced Studies (IHS)

Josefstädter Straße 39, A-1080 Wien

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

Reihe Soziologie / Sociological Series

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Abstract

The present study was carried out in the framework of a European project of the Leonardo da Vinci programme on the development of a European profile of skilled workers in the field of vocational training. It investigates the form in which the professionalization of skilled workers in the field of vocational training is structured, the changes in the division of labor which can be observed among the different categories of skilled workers and the role of these changes play for specific aspects of the development of the system of vocational training. A closer analysis is made of the integration and the role of research within the processes of change as well as of the importance of innovation in the interlinking of structures of labor division among skilled workers in the field of vocational training. The apprenticeship training policy and the establishment of the sphere of higher technical education are analyzed as two specific cases. It is shown that traditional categories of skilled workers can be differentiated from new ones. While a highly specialized and fragmented structure impeding an equal integration in the processes of change and innovation can be made out among traditional skilled workers in the field of vocational training (teachers, administrative staff, politicians and lobbyists, researchers), more complex profiles are to be detected among the new skilled workers (human resource development, adult education, intermediaries). The new system of higher technical education differs from the fragmented traditional structure on the one hand by a stronger integration of responsibility profiles and the demand of an accordingly complex profile of skilled workers, who, on the other hand, do not always find adequate job opportunities.

Zusammenfassung

Die vorliegende Studie ist im Rahmen eines europäischen Projektes im Leonardo-da-Vinci-Programm über die Entwicklung eines europäischen Profils der Fachkräfte im Bereich der Berufsbildung entstanden. Es wird untersucht, in welchen Formen die "Professionalisierung" der Fachkräfte in der Berufsbildung (VET-Professionals) vor sich geht, welche Veränderungen in der Arbeitsteilung zwischen den verschiedenen Kategorien von Fachkräften zu beobachten sind, und welche Rolle diese Veränderungen in spezifischen Aspekten der Entwicklung des Berufsbildungssystems spielen. Näher untersucht wird erstens die Einbindung und Rolle der Forschung in den Prozessen des Wandels und der Innovation im Zusammenspiel mit den Strukturen der Arbeitsteilung unter den Fachkräften der Berufsbildung. Die Politik im Bereich der Lehrlingsausbildung und die Einrichtung des Fachhochschulsektors werden als zwei spezifische Fälle analysiert. Es wird gezeigt, dass zwischen traditionellen und neuen Kategorien von Fachkräften unterschieden werden kann. Während unter den traditionellen Fachkräften der Berufsbildung (LehrerInnen, AdministratorInnen, PolitikerInnen und LobbyistInnen, ForscherInnen) eine stark spezialisierte und fragmentierte Struktur vorherrscht, die deren gleichwertige Einbindung in die Veränderungs- und Innovationsprozesse erschwert, sind unter den neuen Fachkräften (Human-Resource-Development, ErwachsenenbildnerInnen, Intermediäre) komplexere Profile zu beobachten. Das neue System der Fachhochschulen

unterscheidet sich von der traditionellen fragmentierten Struktur einerseits durch stärker integrierte Aufgabenprofile und erfordert entsprechend komplexe Profile von Fachkräften, für die es jedoch nur bedingt ein Angebot gibt.

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1. Some initial considerations concerning “VET-professionals”

Our “EUROPROF”-project aims at the development of education and training guidelines for Vocational Education Training-professionals (“VET-professionals”). The first, and maybe most important step, has been the analysis of the existing occupational profiles of “professionals” in vocational and technical education in several countries, which means that the professional profiles were neither taken as given, nor were they theoretically defined at the outset. The empirical studies, however, gave a rather diversified picture of professional structures of different countries, and they did not solve important questions concerning the structures in the professional field in question. Of course, similarities could be observed throughout the countries, e.g. the fact that there exists no comprehensive profile of VET-professionals in any of the countries, rather various profiles which may be subsumed under that heading; furthermore that VET-teachers in various institutions are probably the largest group in this profession; and finally that the various traits which are attributed to professionalism are developed to a rather low degree, especially the attachment to the academic system. On the other hand, some important aspects in the shaping of a new profile of VET-professionals have remained unclear or disputed, e.g. the relationship of VET-professionals to the emerging field of Human Resource Development whether the aim should be one comprehensive professional profile or many profiles or how the new profile should be attached to research and to the academic system.

This paper attempts to discuss some of these questions, taking the Austrian VET-system as an example and trying to bring together important constructs from a rather broad theoretical background. The more pragmatic issues of VET-policies in Austria will be reviewed against the background of some propositions of organization theory, and the sociological literature about professions and professionalism will also be taken into account. However, we will not go into a detailed discussion of that vast bulk of material, but present hypothetical ideas about how we can make sense of structural issues of the VET-system, and about what “professionalization” could mean in that area.

We will start with the proposition that professionalization is a frequently used term in the discussion about teachers and teacher education. However, there seems to be a gap between the literature on professions and the literature about teaching and teacher education and training: on the one hand the literature on professions seldom refers to the teaching profession since the often quoted verdict of Amitai Etzioni has excluded teaching from the professions by classifying teaching as a *semi-profession*. It is also the case that the literature about the development of teaching frequently speaks about “professionalization” but seldom refers to the literature about professions on the other hand. Michael Eraut (1994), in his book about the

development of professional knowledge and competence, has tried to bridge the gap.¹ He avoids the definitional issues about professions by calling professionalism an ideology and focusing on the process of professionalization as an attempt to serve that ideology -- we could name this attempt '*professionalization without ("real") professions*'. This perspective seems appropriate, as long as the focus remains on comprehensive account of the content of professional practice in existing professions, and on the processes by which practice can be learned and developed. However, if we want to discuss the development of new professional profiles, the notion of the professions as a mere ideology seems a little bit weak.

Special aspects of the VET-system may reinforce the necessity of a broader discussion about the shaping of professional profiles in that domain. The main point is that the VET-system is located somewhere in between several other social systems or sectors in a complicated manner, namely the system of initial education (or compulsory schooling), the academic system and higher education, the employment system and the enterprise sector, the system of occupations and the labor market regulations therefore. The VET-system does not have clear boundaries, but overlaps the other systems. This kind of social and institutional "in between"- location tends to weaken their professional identities of the professionals working there. Two examples may illustrate this: first, as the VET-institutions overlap institutions of education and employment, e.g., in the apprenticeship system, the teachers and trainers do have a foot in either system, which results in different and contradictory demands; secondly, if we listen to discussions about teaching and teacher education, we see that they are mostly concerned with issues from the areas of general or academic education – the practices of VET-teachers are seldom addressed in those discussions. Therefore the development of a profile of VET-professionals seems to be connected to basic structures of a VET-system. In addition, the VET-system is much more diverse and differentiated than that of general education, a fact which splits VET-professionals into many small groups, with little contact to each other.

This leads us to a third point of interest, i.e. the relationship of the existing professional profiles to more basic organizational features of the system they are located in. Here we may refer to basic issues of the professionalization debate and relate them to current aspects of policy-making in education. Some brief comments may illustrate the basic argument: Education systems, especially continental ones, are predominantly described as more or less "classic bureaucracies", more or less strongly embedded in the state bureaucracy.² For decades this organizational mode has been heavily criticized and there have also been proposals for change. The basic direction of the proposals seems to have changed during the last decades. A broadly

¹ Eraut, M. (1994): *Developing Professional Knowledge and Competence*. London: Falmer.

² Abram de Swan, argues in his book about the development of the welfare state that the educational system did provide a national communication framework which was necessary for the process of nation building; cf. De Swan, A. (1988) *In Care of the State*. Cambridge: Polity Press, esp. Ch.3; David Tyack, in his classic work about the development of the American system shows its strong bureaucratic roots which are embedded in a technocratic view of education; cf. Tyack, D. (1974) *The One Best System. A History of American Urban Education*. Harvard University Press: Cambridge.

based and intellectually very influential reform initiative from the seventies in Germany stated, e.g., that the bureaucratic mode of organization was not feasible for the provision of educational services, consequently the *professional mode* was recommended for education. The classic professions, such as law or medicine, served as paradigms for the professional profile of teachers, and establishing the professional autonomy of schools instead of putting them at the end of the bureaucratic line, combined with democratic mechanisms of codetermination for pupils and their parents, was recommended as the appropriate pathway of reform.³ However, this line of reasoning ran against the dominating one in the research on professions, which saw bureaucracy as the winner in a combat against the professions, and wishing for a strategy of professionalization seemed to be pious, but anachronistic. Another more recent wave of proposals had at its center the “production paradigm” of teaching, and the manufacturing plant in industry served as a model for shaping educational organizations, combined with the extension of the market as an organizing principle of the education system.⁴ The likening of educational institutions to business firms in the market as a sustainable solution is questioned on several grounds.

An important argument concerns the kind of process underlying the services of educational organizations. More elaborated reasoning on educational institutions in the realm of organization theory rejected the production paradigm as a model for schooling. The basic “rationale” of educational organizations was opposed to the “rationale” of factory organization in the institutional vs. technical explanation by Meyer, Scott & Deal (1983).⁵ The main point in favor of the institutional model of the school, as opposed to the technical model of the factory, is that the teaching-learning process as the core function is *inherently non-technical*. Therefore the organization cannot be built around the technical functions – the organization rather serves as a kind of umbrella against unresolvable disputes about the “right technique” of education:

“... institutionalized organizations (...) buffer their structures from the actual technical work activities (...) using such techniques as certification, delegation, secrecy, and ritual, these organizations attempt to decouple their technical work from the organizational structure (...) the institutional organization turns its back on its technical core in order to concentrate on conforming to its institutional environment (...) a school, to survive, must conform to institutional rules (...) that define teacher categories and credentials, pupil selection and definition, proper topics of instruction, and appropriate facilities. It is less essential that a school’s teaching and learning

³ Deutscher Bildungsrat (1970) Strukturplan für das Bildungswesen. Empfehlungen der Bildungskommission. Bonn: Bundesdruckerei.

⁴ As an example, see Chubb, J. E. & T. M. Moe (1990) Politics, Markets, and America’s Schools. Washington: Brookings.

⁵ Meyer, J. W., W. R. Scott & T. E. Deal (1983) Institutional and Technical Sources of Organizational Structure: Explaining the Structure of Educational Organizations. In: Organizational Environments: Ritual and Rationality ed. by J. W. Meyer & W. R. Scott. Newbury Park: Sage, 45-67.

activities are efficiently coordinated or even that they are in close conformity with institutional rules.”(Meyer, Scott & Deal 1983, 46-47)

The following striking aspects in the institutional interpretation of educational institutions should be mentioned: First, the almost universal description of several prevailing traits of school systems on which the interpretation is based; second, the proposition that all the characteristics which are contrary to efficiency/effectiveness in a technical view turn out as functional in the institutional view; third, the most important current reform strand in education policy (focusing on the strengthening of the autonomy of the individual school and thus decoupling it from larger institutional structures, and at the same time integrating the activities and the teaching personnel within the schools, thus tightening the former loosely coupled elements) exactly emphasizes the coupling of the teaching-learning activities to the broader institutional structure, based on the expectation that teaching-learning processes would become more effective; fourth, an application of the model to *vocational schooling* points to different “rationales” and hence to a rather complicated relationship between schools and organizations functioning on the basis of the technical model, especially the taylorist-fordist manufacturing organization which has served as a paradigm of industrial organization for a long time. If we take into account the current views on industrial and commercial organization, which refer to post-fordism, lean production, lean management, flat hierarchies, self-directed work, etc., there may be a convergence of the opposed types of organization models – enterprises may become more institutional, and educational organizations may become more technical. Some kind of re-emergence of the professional paradigm throughout the employment system may be a consequence of these new developments in economic organization.

The latter argument may be reinforced at another level of reasoning, if we look closer at the mechanisms of coordination within the different kinds of organization structure. Here we may refer to the analysis of coordination mechanisms in higher education systems by Burton Clark (1983), who distinguishes between three models of coordination: the bureaucracy, the market, and the academic oligarchy. The latter may be seen as a somewhat degrading name for the professional mechanism. Interestingly, throughout the development of organization theory about processes of coordination, a similar “trinity” turned out as the basic concept for distinct coordination mechanisms: the bureaucracy, the market, and social networks.⁶ Now, if we compare the descriptions of the functioning of the network mechanism of coordination to the classic descriptions of the professional organization, and also to the academic oligarchy, we find important similarities. Especially the centrality of “trust” as the main medium of coordination in the network mode (equivalent to money in the market and to authority in the bureaucracy) can be seen as a similar mechanism to the self-regulation of the professions based on a common ethical code. If it is true that these two concepts, coordination by the

⁶ See Thompson, G. et al. (1991) *Markets, hierarchies and networks. The coordination of social life*, London: Sage & Open University Press.

networking mechanism and the professional organization as a distinct form of work organization, represent some common principles or forms of social organization, then the two strands may reinforce each other and gain importance in the future changes of work organization. A third line of argument may be added here by mentioning the forms of institutionalization of expertise developed by Andrew Abbott (1991), which forms a similar trinity: commodities (market), organizations, and people (professionals).⁷

Concerning the VET-system, coordination seems to be a central aspect not only because of its diffuse organization, overlapping with other systems and lacking clear-cut boundaries, but also because of the following features: First, coordination with employment is clearly necessary because vocational education and training serves the functions of employment; second, coordination between vocational education, at least performed at school, and employment has to span two distinct systems which are coordinated by the two different mechanisms of bureaucracy and market. If we look at the coordination problem from the perspective of spanning different modes of organization, tensions will be easy to predict, and, of course, we all know that the coordination problem is poorly solved. As a recent OECD-report states drastically, "... *all countries are faced with the same challenge: a severe crisis in the relationship between education and economic systems*". (Durand-Drouhin/Romani 1994, 12)⁸ The tension between the different coordination mechanisms is also reflected in the traditional "theoretical solutions" for coordination, which have tried to impose the logic of one mechanism on the other – the manpower requirement approach followed the bureaucratic logic of planning and tried to impose it on to the market economy, the human capital approach tries to impose the market logic on to the education system. Both were not really successful. Based on the sketchy arguments above, we may seek another coordination mechanism, which is "*neither market nor hierarchy*" but "*network form(s) of organization*" (Powell 1991).⁹ The coordination managed by the professions may serve as an example, and the European Commission in its *White Paper about "Teaching and Learning"* proposes a strategy in that direction. Of course this is not to say that all problems will automatically be solved by implementing this kind of coordination mechanism, rather the possibility of the setting-up of more "professional" mechanisms of coordination and "soft planning" may be investigated.

The issue of coordination is closely linked to the need for innovation in the VET-system. We may distinguish between several kinds of innovation strands: First, the ongoing innovation in economy has to be transmitted to VET in a reasonable way; second, an innovation of

⁷ Abbott, A. (1991) *The Future of Professions: Occupation and Expertise in the Age of Organization*. In: *Research in the Sociology of Organizations. A Research Annual. Vol.8: Organizations and Professions* ed. by P. S. Tolbert & St. R. Barley. Greenwich (Conn.): Jai, 17-42.

⁸ Durand-Drouhin, M. & C. Romani (1994), *The Issues*, in: *OECD/CEREQ, Apprenticeship: Which way forward?* Paris: OECD.

⁹ Powell, W. W. (1991), *Neither Market nor Hierarchy: Network forms of Organization*. In: Thompson, G. et al. (1991) *Markets, hierarchies and networks. The coordination of social life*, London: Sage & Open University Press, 265-275.

teaching/learning has to be performed in accordance with new developments; third, VET should be able to take an active role in promoting innovation; fourth, innovation concerning broader social and environmental issues should be fostered by VET. In several countries, initial formal education and the training of almost the total cohort of young people for the various qualifications and occupations is performed by the VET system, therefore that system has in fact taken on a “gatekeeping” role in socializing the young generation for working life. We may assume that a proper performance of the “technical” functions of innovation, keeping in pace with the innovation process and contributing to it, can reinforce the possibilities of VET-professionals to influence the broader social issues. Clearly an improved status of the profession is required to reach that objective.

2. Basic Features of the Austrian VET-system

The overall VET-system may be broken down to 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 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 took the form of on-the-job activities (we may term this part, using a somewhat restricted concept, Human Resource Development, HRD).

Considering the respective weights and relationships between the mentioned parts of the system, the highly formalized initial VET-system is clearly the most developed part. The public educational budget is mostly spent on 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 comes to a large part from private means, however, there are additional means from the labor market policy to be spent on training activities. The area of HRD is even less developed and has hardly come into consideration in policy discussions.

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 hold a certificate of that level, and the proportion of VET-institutions among upper secondary level students is about 75 per cent of an age cohort.¹⁰ The Austrian VET-system has both a strong apprenticeship sector *and* a strong

¹⁰ Lassnigg, L. & W. Pollan (1996) Das österreichische Qualifizierungssystem im internationalen Vergleich. Ein Überblick. WIFO-Monatsberichte (No.12), 763-780.

system of vocational and technical schooling at the upper secondary level. 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 formalized, with a strong stance against regulations at the central level. However, the most important building elements of the system are long and highly formalized "study lines" leading to rather specific vocational categories. The programs 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 of apprenticeship are centrally regulated by decree of the Ministry of Economic Affairs.

This basic structure imposes some significant consequences on to policy as well as on to the behavior of actors within the system. There are numerous study lines in various institutions, and the formalized regulatory system constitutes a very complex array of regulations difficult to overlook.¹¹ 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 organized, 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 formalized, with emphasis on work sites as well as on the employers' side of the partnership. Within the formal framework, the enterprises may be very discrete about 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 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 centralized 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 can be observed concerning management and organizational structures. At the bottom level of the teaching and research units, great power is concentrated — especially in the hands of the highest-ranking among the university staff, e.g. full professors.

¹¹ There are some 350 courses on offer, 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 legally based curricula (*Lehrpläne*). Breaking it down to 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 impossible to overlook.

An important innovation of the basic structure of the system is currently under discussion, 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. They also bring a new regulatory framework to the Austrian education system; one driven by institutional flexibility, accountability, and professional autonomy. We will discuss some features of the new system later in this paper.¹²

This sketchy overview shows us that a classic bureaucratic system (schools, and — less tightly regulated — universities) coexists with a more loosely regulated market-system (enterprise part of apprenticeship and further education). Tensions between these two sectors, partly reflecting the positions held by employers' vs. employees' organizations, are strongly influencing policy discourse. From the point of view of the actors in this system, there are three more or less distinct "worlds" existing side by side and reflecting 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' organizations, etc.);
- * and the administrators who act between these two groups, bringing the regulations "into life".

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 1,050 full-time vocational and technical schools, this is a high figure. 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 about 200 hours per year (4 hours weekly), or 10 per cent of the annual working time per apprentice. 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

¹² See BMWF & BMUK (1992), Diversification of Higher Education in Austria. Background Report submitted to the OECD, Vienna.

trainers, and the training requirements for that category is very low and frequently challenged in the policy process to be abandoned completely.

The individual schools do not have a strong position as acting units. This kind of centralized and highly regulated system, including a broad market-co-ordinated segment, produces a strong bias towards top-down processes, and policy questions mainly refer to features of the institutional structure. The recent debates in Austria about change and innovation are very much concerned with the *deregulation and autonomy of schools*. Individual schools shall get more discretion in many fields, 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, it is known that these are widely neglected by the policy process. However, the question remains whether the neglect means either that there are no bottom-up processes in the system, or that they are going on in a more hidden and invisible manner. This point will be discussed more thoroughly under the heading of change and innovation in Austrian VET.

Further Education and Human Resource Development (HRD)

In general, there is no similarly organized and regulated public system to that 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.

The overall participation in vocational further education and training is between 10 per cent (minimum estimate) and one third (maximum estimate) of the labor force per year. A general characteristic of further education is that it very scarcely provides basic education. Therefore, people who have little initial education participate to a much smaller extent in further education than people who have better initial education. In addition, there are only very few programs of 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 a requirement for setting up an enterprise on the other. 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 for acquiring higher-level qualifications. These courses are part of the so-called *second-chance education*. The programs within the *second-chance education* block provide — up-grading courses which offer the same type of certification as upper secondary schools for employees, and — a variety of courses introducing work-oriented knowledge and skills to beginners or enhancing or up-grading the knowledge and skills of graduates from VOTEC institutions. Though this system has expanded during the last decades, it is still rather small compared to the initial education system. About 20,000 students participate in this system, half of them employed (the range of this system equals about ten per cent of initial full-time schooling at the upper secondary level).
- **Labor market training.** Labor Market training is funded by money from the unemployment insurance and provides mostly short qualification courses which are demanded by the labor market, on-the-job-training in enterprises is also partly subsidized. Participants are mostly unemployed and get the means for training as well as for their living expenses. About 55,000 participants are financed per year (10,000 in enterprise training), 40,000 of them also in their living expenses (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, but most of the training is provided by the adult education and training institutions operating on the market.
- **The further education and training market.** Further education is mainly organized on a 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 of adult education, called KEBÖ, collects information on adult education and training. The personnel employed by this network is 3,800 employees plus 67,500 persons who participate in this work on a part-time basis (38,700 of which are salaried, and 28,800 who perform voluntary work). However, the reported participation includes a wide range of different activities, which belong only partly to vocational education and training. Because we lack information about the subjects of the reported activities, it is not easy to identify the share of vocational education and training in the market. There are also 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 on the size 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 is omitted here). The number of participations in this market can be estimated at about 550,000 a year (all other above categories of further education and training — second chance education, labor market training, in-service and career education and training — not included) About two thirds of this market are 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, two thirds financed by the contributions of clients. One half of these contributions come from employers, the other half from employees.

- **In-service and career education and training.** Among organizers and providers of further training programs, 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 public administration, which owns special institutions and requires the further education of all civil servants, and in the education system, which also owns an institution of further education of the teachers in every region. The further training of civil servants is estimated at least at 15 per cent a year, teachers participate in further education on average 3 days a year. Another important institution is the training of master craftsmen, which includes education and training for taking over the responsibility for the apprenticeship training in an enterprise. Especially in small and medium enterprises, a high share of their owners have finished that kind of training. In some branches, especially in banks and insurances, in-service further training of adults is frequent. In sum, the participation in in-service training is estimated at 20 to 25 per cent of all vocational further education and training, or at up to 6 per cent of total employment. However, it should be noted that these estimates are not very accurate, and can only represent a possible rating of sizes.
- **Human resource development (HRD) and other innovative activities.** HRD may be seen as “a new occupation seeking professional status”(Odenthal/Nijhof 1996, 7)¹³ and is described by some authors as an activity which grows out of initial or further vocational education activities in an enterprise and finally integrates training activities and organizational development. HRD-activities are not reported and have seldom been investigated into on a systematic basis in Austria so far. 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 on enterprises judged by their “peers” as pioneers in human resource management has found only large enterprises with more than 1,000 employees performing in this field. Further impressions were that the field was very much in flux and in

¹³ Odenthal, L. & W. J. Nijhof (1996) HRD Roles in Germany. Studies in Human Resource Development. DeLier: Academisch Boeken Centrum/ Universiteit Twente.

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).¹⁴ In addition, a market of consulting firms is developing, however, these firms are very small, and a lack of quality control is frequently complained about. Another line of innovative activities is developing in the area of territorial development policies. Since the early nineties the establishment of “Impulse Centers” (Regional Innovation Centers, Technology Parks, Technology Transfer Centers, etc.) is an important part of development which indirectly contributes to vocational education and training. This policy focuses on the development of “intermediaries” and is closely attached to the activities and the support structures within the policies founded under Objective 4 of the European Social Funds (ESF).¹⁵ About 20 institutions of this kind were founded during the last decade, with the objective of providing material and immaterial infrastructure for innovative activities in the respective regions.¹⁶

Actors in the system: Division of labor among VET-professionals

Basing it on the description of the system, we may now give a first overview of the various categories of “VET-professionals”.¹⁷ As far as the division of labor among the professionals is concerned, we can isolate the following categories:

1. Different kinds of *VET-teachers*, who are clearly separated by different education pathways and, in addition, are not normally involved in research. (Especially three kinds of VET-teachers may be distinguished between, who are differ in 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 in 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 for their educational functions and now have only a small amount of training;
3. Teaching personnel in the institutions of initial and continuous *VET-teacher education and training*;

¹⁴ Boos, F. & B. Heitger (1993) *Modernes Personalmanagement und arbeitmarktpolitische Konsequenzen*. Research report. Vienna: Bundesarbeitskammer (Chamber of Labour).

¹⁵ 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).

¹⁶ Cf. OECD (1995) *Local Responses to Industrial Restructuring in Austria*. Paris: OECD.

¹⁷ The term “professional” is used in a loose manner during this description and will be refined during the following sections.

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 compete for research contracts on a market;
6. *Human resource development personnel* in many small counseling firms and in large enterprises;
7. *Personnel in adult and further education*, who mainly do part-time work on a free-lance basis.
8. *Personnel in intermediary institutions*, who provide various services, and whose main function is networking between the various actors and institutions involved.

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 chasms 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 center of the vocational training system, are mostly not perceived as VET-professionals, because they do 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 in 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 between “old” and “new” VET-professionals, we may refer to the 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 with 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 in which the professionals operate.

A brief discussion of the 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 a point of reference, 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%)

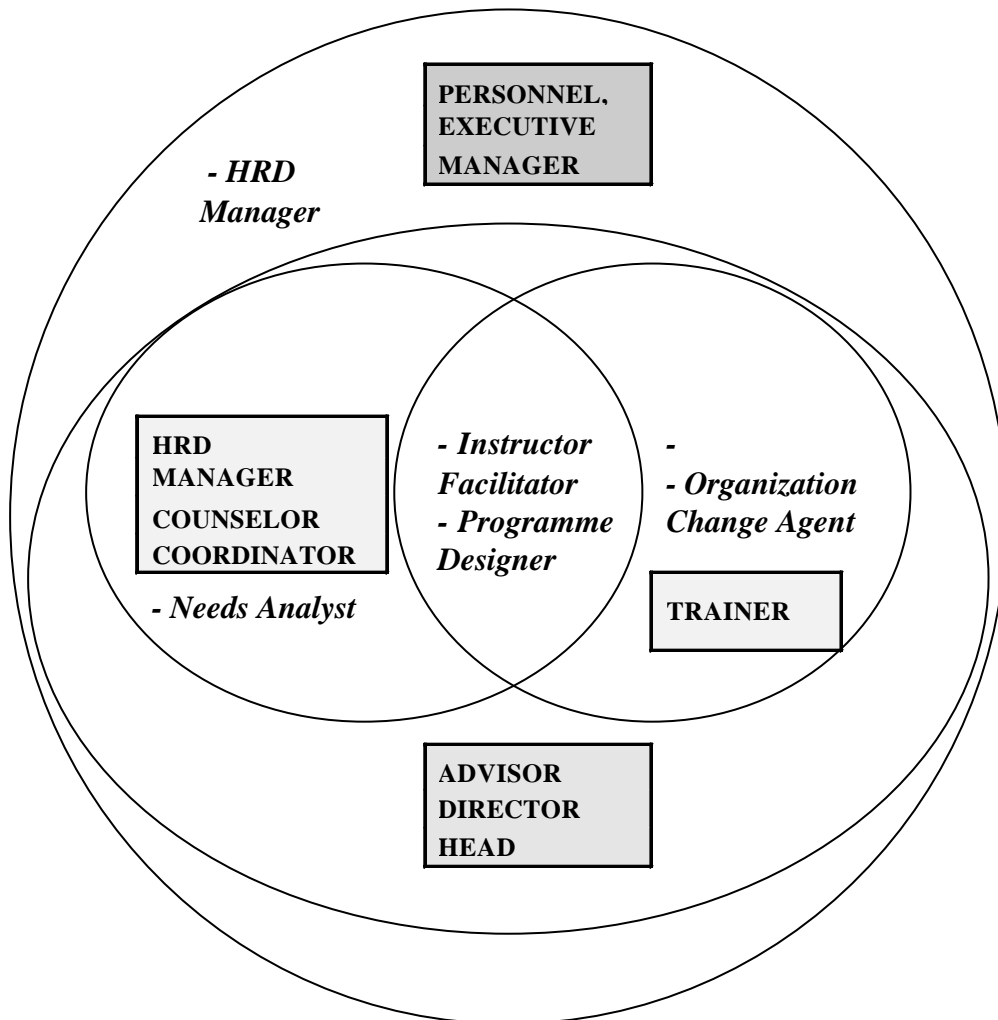
- Instructor/Facilitator
- Program Designer
- Organization Change Agent
- Needs Analyst

Specialized roles (performed by 6-32%)

- 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-practitioner 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- Coordinators (20%), Advisors, Directors-Heads (26%), Personnel or Executive Managers (4%). In all these positions the roles of *instruction/facilitation* and *program design* are mostly performed by practitioner (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 roles of the HRD-managers, which seem 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 mostly performs teaching functions and is frequently involved in program 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 program 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:

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

	“OLD” PROFESSIONALS VET-System ^a			“NEW” PROFESSIONALS. Researchers	“NEW” PROFESSIONALS. Other Frameworks ^b		
	Teachers Trainers Tutors	Administrators Prinzipals Managers ^c	Politicians Lobbyists		Adult Educ.	HRD	Inter- Med.
Common roles							
Instructor/ Facilitator	XXXXX	x			xxx	xxx	
Programme Designer	xx	XXXXX	xx	x	xx	xxx	x
Org.Change Agent		XXXXX	xx	(x)		xxx	xxx
Needs Analyst		XXXXX	XXXXXX	xx	x	xxx	xxx
Specialized roles							
Materials Developer	(x)	xx			x	x	
Marketer		(x)	XXXXXX		x	x	xxx
Indiv.Career Dev. Advisor	x					x	
Evaluator (Inspector)		XXXXXX	xxx	xx	x	x	xxx
HRD Manager		xx				x	
Researcher				XXXXXX		x	
Administrator	x	XXXXXX			x	x	

^a The counselling function is mainly performed outside the VET-system within the labour market organisations; within VET the teachers are performing those activities.

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

^c The functions of development are performed mainly in this category.

- ⇒ On the side of the “old” professionals we see a rather clear-cut division of labor between the professional categories: teachers teach, researchers do research, administrators and managers run the system, doing most of the developmental work, and the politicians and lobbyists assess the needs and sell their ideas.
- ⇒ On the side of the “new” professionals we can see two interesting patterns: First, the roles are overlapping and scattered to a higher degree, meaning that there seems to be a less clear-cut division of labor; second, there are similarities between certain “new” patterns and certain “old” patterns: teachers and personnel in further education; HRD-personnel and administrators-managers, however with the important exception that, in that category, teaching and the other functions are merged; intermediary personnel and politicians-lobbyists.

The observed pattern, which has to be elaborated by further research, deserves some comment. 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 “enabling” 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 experiences in different countries. In Finland a strategy of broadening the teachers’ responsibilities has been employed; however, this process apparently has not brought about very positive results. Anja Heikinnen (1996, 11) cites a teacher who complains “... *it seems that teaching has become peripheral*”.¹⁸ 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 also broad support for in-service training as well as participating in new development projects.*”(Stoel/Streumer 1996, 16) On the other hand it is mentioned that “... *most teachers teach traditionally*”(ibid., 16).¹⁹

¹⁸ Heikinnen, A. (1996) Vocational Education as a “life project”? Reflections from the case of Finland. EUROPROF Research paper. University of Tampere.

¹⁹ Stoel, W. G. R. & J. N. Streumer (1996) The changing role of teachers in secondary vocational education. EUROPROF Research paper. University of Twente.

3. Change and Innovation in the System, and the Role of Research

Going back to the basic structure of the system, we may adopt 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.²⁰

-- "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 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 is given by 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

²⁰ Archer, M. S. (1979) Social origins of educational systems, London & Beverly Hills: Sage

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 reforms. “*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 the quality of the performance of the system.

In any case, it seems to be difficult to solve this contradiction. We can find various illustrations for both interpretations. A possible solution may be the duality of institutional change and the change of processes within the institutions. It is often mentioned that policy and research are 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 on 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 even if the framework remains stable, and this change may not even be observed because the actors involved agree on the basic normative system — as Karl E. Weick (1976) has posed it in his famous paper about *loose coupling* by confronting his really “*unconventional 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)²¹

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 the legal foundations of education policies. There is a law which constitutes organization, i.e. the structure of educational institutions and programs (“*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 a 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

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

painstaking detail the rights and responsibilities of the various categories of teachers (*„Lehrerdienstrecht“*) – interestingly, those aspects determining in fact many parameters of the teaching-learning process, e.g. by giving weight to the various subjects and non-teaching activities, or structuring the time allocation of teachers and thus strongly influencing the actual teacher-pupil ratios, are normally not perceived as an issue of education policies. These aspects are rather 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 subject, he has to teach the pupils who have to be there and, given the regulations about examinations and the 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 there is 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 into two competing camps, the *progressive* one answering “no”, the *conservative* one answering “yes” to the above question. Accordingly, the progressive camp, in their struggle for reform, have concentrated on the change of organizational issues, the conservative camp have mainly emphasized the crucial role of the teachers, their activities in the classroom and their “professionalism”. A closer look at the strategies of the competing camps, however, concerning the teaching profession, shows 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 the *organizational reform* of teacher education (especially upgrading all of it to full university status, which in fact is hardly realistic for the time foreseeable because of 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 performance of widespread activities 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 developing their own practice.²² On the other hand, the strongly bureaucratic structure of the system has come under scrutiny from the center because of doubts about its

²² 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.

effectiveness in controlling the system. Therefore the scenario of “giving the schools more autonomy” has assumed a more concrete shape during the last five years or so.²³

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. In this interpretation, the change would not be fundamental. It would lead to an enrichment of the core process, and thus to a change in the teachers' work.

Here we have the point where professionalism and the VET-system come into consideration again. The above aspects have dealt with the overall education policy. However, there are special conditions in the VET-system. Firstly, we must refer to the goals of education and training policy. The “institutional theorists” who rely on the concept of decoupling argue that, because of the intrinsic uncertainty of the core processes in education the principal problem is making sense of the activity and the environment it is embedded in, 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”,* 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 part of the strongest empirical support for the theory. The conception leads to the statement that *“a school succeeds if everyone agrees that it is a school; it fails if no one believes 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 with conducting endless debates about abstract goals. A good example of the significance of that issue is the relation of academic education to vocational education.²⁴ There

²³ Posch, P. & H. Altrichter et al. (1992) Schulautonomie in Österreich. Bildungsforschung des BMUK Nr. 1. Wien.

²⁴ The European Commission's White Paper about teaching and learning explicitly refers to that issue, stating “the end of debate on educational principles”(p.42f.), and thus inducing the council of education ministers to give a

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.²⁵ Considering the position of VET-professionals, we can now find a possible cause for their relatively 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 holds true even more strongly for trainers. The requirement for the employment as a VET-teacher is the mastering of an occupational field and a 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 programs for VET-teacher education and training clearly is that the substantive component of mastering the subject has been learned before beginning the program, 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 programs are designed as in-service training, when teachers have already started to do their job at school. This 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 program ("Wirtschaftspädagogik") has been developed which provides both, the substantive subject and the pedagogic subjects. Practical work experience outside education is also required in this program.

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 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

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.

²⁵ "Western countries have inherited from Greek civilization a deeply rooted 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).

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 of the system. On the one hand, the choice of a teaching career is judged as a possible signal for the lack of success in economy, consequently 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 economy. It has been mentioned that this mechanism of direct exchange of experiences would naturally bring an upgrading of the teachers' competencies. Some administrators systematically try to select teachers who perform their other business successfully. 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 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 an apprentices' trainer's certificate is predominantly described as a formal duty required by the regulations, but hardly has any positive effect in practice – frequently even negative effects are reported, such as 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 a long-term political struggle, the relation of the trainers in enterprises to VET-teachers in part-time vocational schools for apprenticeship is heavily distorted, the two groups degrading each other. Improvement from the side of VET-institutions is not foreseeable 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 improving 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 improving the competencies of the work force. So, a very rich potential source for the implementation of the "learning organization" may deteriorate by the lack of professional sources to make proper use of it.

However, by referring to the field of HRD, we have brought a third potential "profession" into consideration which seems to be involved and which is based on the enterprise sector rather than on the education sector. This brings us back to the aforementioned issue of coordinating. At the outset we had the problem of coordinating 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 of bringing together our diverse elements.

The role of research

In our discussion of the division of labor 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 knowledge and making use of that knowledge in practice seems to be strongly present in Austrian VET. As the OECD²⁶ and several others have argued, this does not seem to be a specific of Austrian VET, but we will 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 could be described by somewhat exaggerating two points:

* “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 mostly goes without research.

On the other hand there are obviously demands for change which are not met sufficiently. Moreover, critics claim 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;
- Providing of sufficient basic general education as a basis for lifelong learning;
- Implementing new technologies in the apprenticeship trades;
- Developing 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 that may serve as a basis of further discussion. Especially two factors seem to be crucial for research and change in the Austrian system, the first being the division of labor among the “old” professionals, the second being the institutional structure.

²⁶ OECD (1995) Educational research and development. Trends, issues, challenges. OECD: Paris.

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

- Different educational paths (full-time technical and vocational schools on the one hand and apprenticeship and part-time schools on the other) are located in separate institutions;
- Within these institutions there is a high number of highly specialized courses, about 100 at full-time schools, and more than 200 in apprenticeship;
- All these courses are centrally, and in apprenticeship also regionally, regulated by law, including painstakingly laid-down details of curricula, time-tables, etc.;
- Therefore the radius of action of teachers is limited to their actions within the classroom, whereas decision-making takes place on a centralized, political level;
- The companies providing apprenticeship training only have to meet a minimal set of 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 a low status compared to the other teachers (there are separate teacher training institutions for the practical subjects, mostly on a part-time basis).

Research on vocational education is provided mostly conducted as contractual research by institutions affiliated to the social partners, and it was mostly required by the labor market authorities. This means that research on vocational education and training is neither carried out by universities, nor by teacher training institutions.

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

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

Fachhochschule?

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

- The practitioners 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 labor market authorities who don't have little say in educational matters.

An analysis of research topics in Austrian VET research (Lassnigg/Pechar 1994)²⁷ shows that most of the fields are very poorly covered by research. Most resources are used for *monitoring the labor market* and the *production of information materials* about education and training institutions and the respective occupational profiles. The other topics of central concern in

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

Austrian VET research, features of the apprenticeship system, further education, and evaluation and reform of educational profiles, are dealt with very superficially.

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

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

4. Apprenticeship Policy and the Setting-up of the Fachhochschule: Two Cases of Reform and Non-reform

In this final section, two cases of reform in Austrian VET are briefly discussed, to illustrate some of the wider implications of this paper.

Reform of the Apprenticeship System

The apprenticeship system is organized 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 basic 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 Organizations, both the Chambers of Labor and of Trade and Commerce). The social partners have important influence on controlling the system, important decisions are made on a consensual basis. However, the system of control is biased towards the 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.

Compared to our organization models the apprenticeship system is an outstanding case, in cutting across the bureaucratic, the professional, and the market coordination modes, and in being centrally regulated and decentralized at the same time. In many policy documents the consensual manner of running the system is emphasized. However, a long struggle has been going on about reforming the system, without 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 is not up to providing the demanded qualifications.

In addition, the system of quality assurance -- concerning the use of the above indicators as well as the power of the actors involved 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 program of an apprenticeship system reform were developed, which should have been implemented in 1997 and 1998. The government, the departments of education, science, labor, and economic affairs, and the social partners had been included in that process. The following dimensions are concerned.²⁸

- ◆ 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 number of apprentices in relation to the number of employees
- ◆ A task force for the development of new apprenticeship trades for future trades and occupations
- ◆ A task force for the developing of strategies for the acquisition of additional training slots, and for the improvement of the promotion strategies, including mechanisms for re-allocating of funds for training
- ◆ Promotion of training equipment and establishments, and 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 labor costs for apprentices;

²⁸ 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 compulsory educational and vocational information in lower secondary school;
- ◆ Improvement of co-operation between schools and enterprises;
- ◆ Reform of the Pre-Vocational Year at the 9th grade of compulsory school;
- ◆ Implementation of a Vocational Matura (“Berufsreifeprüfung”) to improve access to higher education, and development of additional preparatory courses in the VET 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 program of measures supposed to solve the crisis in the apprenticeship system shows a complex structure which involves a wide array of measures with, mostly, a long history in the Austrian debate, some of them having been on the agenda for decades. Because there is a high commitment in the political system to providing favorable conditions for the education of youth, for training and employment, the signs of crisis have quickly brought the principal actors into action: the government, the social partners, and the involved institutions. Steps towards solutions, stuck in conflict for years, may now be completed within a few months.

Related to our discussion, the evolvement of the program 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. Therefore the program was designed within the policy system in a highly ad-hoc manner. Research was not involved, although the program is based on strong assumptions as to the causes of the crisis, which gives room for doubts about its efficacy. However, there is no open debate about alternative strategies.

With two alternative interpretations of the relationship of organizational structure and reform to consider the case of apprenticeship is difficult to interpret within the centralism-decentralism scheme. At the first glance, the system clearly seems to be decentralized, coordinated by the market mechanism. If we take this seriously into 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. In the institutional interpretation, however, 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.²⁹ A third aspect which should be taken into account is that of the strong “vocationalism” of the apprenticeship system and its relationship to professionalism. Maybe there is a hidden mechanism of professional networks, which contributes to the coordination of the apprenticeship system.

Setting up the Fachhochschule sector

In 1993 a new law was 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, concentrating 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 secondary schools. It was not until 1988/89 that the question of the non-university sector was once again taken up. At 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 made 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 on to the political agenda.

Subsequent to the agreement between the political parties, discussion was developing in several waves. The principal process was evaluated by an OECD review (BMWf & BMUK 1992). Although some research was done in the process of developing proposals, the proposed concepts were developed in the political and administrative system. The proposed models of the new institutions in Austria can be classified within the paradigms of organizational co-ordination modes: market, hierarchy, and profession -- the latter being further differentiated into two subtypes: clan and network. These models correspond to the existing institutional frameworks of schools, universities, and commercial enterprises working in continuing education.

The co-ordination models developed by organization theory – bureaucracy, market, and social networks – are generalized forms of the modes of organization of a higher education system developed by Burton Clark in his well-known study. The analysis by Burton Clark places pure state authority and pure market exchange at the extremends 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 organization theory, however, stresses the shortcomings of the market as an organizing

²⁹ 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 – apparently in other systems, where the apprenticeship system did not survive, it was organized on a more private contractual base.

principle, even in the realms of business enterprises and economic activity, presenting *network-structures* as a functional equivalent. As a distinct co-ordination mode networks are built upon the professional paradigm, with *trust* – opposed to money or power – as its central medium of co-ordination.³⁰ 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 typify a network of relatively independent social elements. It is only by emphasizing the cross-cutting chains of social, political and economic relationships that constitute networks that co-ordination will be, and is, achieved."³¹ If we take William G. Ouchi's notion of *clans*³² 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 organizational 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.³³ We should stress that organizational analysis points refers to real co-ordination as a kind of *mixture of the different "ideal-types"*.

Three concepts were developed to attempt 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 organization of state education", this concept implied that only an extreme minimum of public control or influence should be exerted. Funding by public authorities was only intended as a last resort. Two further concepts, which could be termed the "*privatization concept*" and the "*accreditation concept*", attempted to develop flexible and innovative concepts of organization in a more moderate form with a higher degree of public control.

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

If we analyze the process of policy formation with respect to the interest groups represented by the proposals, we can identify positions cutting across traditional political and ideological borders to a considerable extent. The accreditation concept, which has been taken as the

³⁰ See Thompson G. et al. (1991), *Markets, hierarchies and networks. The coordination of social life*, London: Sage & Open University Press especially Chapters 22-23

³¹ Frances, J. et al. (1991) Introduction, in Thompson et al., loc. cit., p.3.

³² Ouchi, W.G. (1980) *Markets, bureaucracies and clans*, *Administrative Science Quarterly*, Vol. 25, p. 129-141

³³ See Thompson, G. (1991) *Comparison between models. Introduction*, in Thompson et al., loc. cit., p. 244.

basis of the common proposal of the two ministries, is a product developed mostly within the central administrative bodies of the education and higher education systems, assisted by 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 the organizational model of the *Fachhochschule* framework clearly differs from the overall system. It was intended as a “professional” model, which means that the central decisions on setting up programs should be made by a professional accreditation body. Professionals are defined by their education and their experience. On the basis of certain general criteria, the study programs can be developed and proposed by a group of experts and evaluated subsequently by the FHS-council using demand and quality criteria.

The implementation process of the *Fachhochschule* is also being evaluated. Here we can see that a 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 of the new study programs (cf. BMWF & BMUK 1992, Ch.B3). Another concept has put the emphasis on research concerning the respective occupational areas as an element constituting the professional identity of the *Fachhochschule*. The idea behind this is that curricula as well as proper teaching could be developed best against the background of a well-founded knowledge of the occupational field in question. In addition, research about developments in the occupational field would be a good basis for further developing the programs (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-programs on the other hand. The evaluation shows that it has not been easy to fulfill the requirements, as these necessary qualifications are not offered in Austria. The implementation process may be characterized rather as a political pragmatic undertaking than a professional one. The evaluation shows that the members of the FHS-council report they had been lacking in 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 fields of quality assurance and innovation.

Thus the development of the Austrian *Fachhochschule* shows that a very different framework can be set up; however, the required professional expertise for the proper running of the new institution has to be developed during a rather long process, and it is difficult to assess whether that process has started yet.

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