

1. FUNDAMENTALS

1.1 Adult Education

Adult Education is the field of educational science (pedagogics) that involves the conceptualisation and research of adult education and learning. However, it has only relatively recently been established as a special discipline. It was not until the 1970s that departments and professorships of adult education were created, although theoretical and empirical analyses on adult education already existed and were being applied in practice in the Federal Republic of Germany (e.g. W. Flitner, F. Borinski). Interestingly enough, the specialisation and the scientific-political differentiation of the discipline "Adult Education" (sometimes also called "Andragogics") is, in general, considerably less distinct in other European and non-European countries where, to a certain extent, adult education issues are analysed more intensively from a social-pedagogical approach (e.g. in Spain).

Adult education deals with the

1. *fundamentals* (theories),
2. *development* (history),
3. *need* as well as
4. *the contents* and
5. *processes* (didactics),
6. *the ways and forms of learning* (methodology),
7. *the individual learners* ("learning subjects") with their biographical, socio-psychological and socio-cultural background as well as their respective adult learning acquisition and interpretation models (psychology of adult-age learning, adult socialisation research),
8. *the addressed and target groups* (research on environment/milieu target learners and participants),
9. *the legal and institutional* status of adult education, and the
10. *general framework conditions and development trends in further education policies* and at the *international level*.

In addition to this and in recent years, the subject areas of “marketing”, “management” and “quality assurance” in adult education have emerged more clearly, so that adult education has also responded to the tendency towards a stronger positioning in terms of market, competition and customer orientation. The above-mentioned subject areas and fields of adult education are accessed from both a theoretical perspective, with a descriptive and structural approach, as well as empirically. Empirical research of adult education utilises both quantitative (empirical-analytical) and qualitative (social science and hermeneutics) analysis. Regarding the analysis of the participants’ requirements and their learning, analytical and acquisitional behaviour, German research on adult education has undergone a far more distinct development in the sense of the qualitative research paradigm. This can be attributed to the structural parallelism between qualitative research and adult education (Tietgens): both involve the comprehension, the dependence on the interpretation, as well as the subjection to the interpretation of interactions and subjective acquisition.

As adult education began to conceptualise its object as a “life world related learning process” (Schmitz), it also succeeded in developing the basis of an adult learning theory that broke away from the narrow scope of behavioural learning theories and succeeded in describing adult learning as the process of experience-learning marked by the respective interpretation patterns. With the development of such an acquisition perspective, adult education in the 1980s and 1990s advanced toward its genuine core, which it does not share with any other scientific discipline: it analyses the subjective acquisition of knowledge, interpretations and experiences in the learning processes, by means of which adults, on the basis of their biographical and life experiences, make an effort to transform their current interpretation patterns and concepts, well aware that these processes are facilitated and promoted by professional intervention, but can hardly be technocratically generated. Furthermore, this genuine discipline puts it in a position –as an interdisciplinary-oriented science– to “consult” the contributions of other scientific disciplines (e.g. psychology, sociology) in regards to whether and to what extent these characteristics and features of adult knowledge acquisition may be understood in greater depth and in a more multifaceted manner, and if they have more extensive courses of action. In this sense, for example, “lifespan psychology” has submitted as many relevant proposals as the other newer modernisation theories. However, similar interdisciplinary approaches and proposals are also currently emerging from the newer cognitive sciences, the newer system theories, biology and constructivism, which help re-conceptualise the individual variation and self-organisation capacity of learning individuals, but the learning organisations as well.

1.2 Globalisation and its Consequences on Education

In regards to the dimensions of educational theory affected by the worldwide implementation of a uniform market principle and an escalating international interconnection, the impact can be analytically divided into three different dimensions: the individual, society and the contents. In the following, these three dimensions of the effects shall first be briefly examined, in order to subsequently intensively address the issue of the consequences of globalisation on the (necessary) development of the individual's competencies.

If education is defined as the capacity to create a reflective life design and configuration, then adjustment as well as alienation competencies can be derived from the globalisation trend. In order for individuals to "cope" adequately in a globalised world, they should, in the first place, have relevant language and sociopolitical intercultural competencies and knowledge. Furthermore, education in development policy and international politics as well as in the national economy should also be substantially expanded. For this to even occur, society must first reformulate the educational mandate given to schools, and also achieve a lasting modification of its expectations on the school system. While its objective surely must continue to be the enculturation of new generations, which –as they say– must learn to "read, write and do arithmetic", but that alone is no longer enough. Today, schools should preferably prepare for lifelong learning, and should aim less at training individuals to "possess" culture and more to "design" their own life world and social milieu. A new, modern educational ideal is thus described –as shall be presented– through functional and reflexive competencies.

However, a component of such reflexive competencies is also the fact that education today also facilitates development of the capability to distance oneself from one's own cultural models, and therefore pave the way for opening up to the life and interpretation patterns of different cultures. Interculturality should become an ongoing educational principle that should serve as a didactic "burning glass", in order to approach an intercultural thematisation at as many thematic nodes as possible. It thus has to be assumed that only those who have penetrated their own selves can really perceive that which is foreign. However, this also applies the other way around: the view of what is foreign contributes to the better understanding of one's own self.

It would only be realistically feasible to implement these expectations of an intercultural education if the contents of our education system are analysed and justified once again from a didactic perspective. This re-thinking of the school concept, which was promoted by Hartmut von Hentig –including the sugges-

tion that the process could imply removing up to 50% of the curricular contents of the compulsory syllabus- is far more radical than may be suspected at a first glance. This ultimately implies parting with the still predominant and deeply-rooted material oriented concept of education ("subject matter" and "subject contents") and turning towards a change in the learning cultures (Arnold/Schüßler 1998). This learning culture orientation takes the plain fact into account that only those who, already at school, were "allowed" to develop their own strengths and self-confidence in their own design and configuration competencies, can manage to "come to terms" with the constantly shifting conditions of a globalised world.

For years now, the discourse on adult education and vocational training in the Federal Republic of Germany in particular has striven for years to underscore the consequences arising from these tendencies to shift towards learning in a society of continuing education. Whatever terms are agreed to in the end -the issue is about a modern concept of education, about action competencies as well as key qualifications (of both functional and alternative origins)- the fact cannot be overlooked that the debate comes increasingly closer to the concept of a "reflexive modernisation", as that discussed by Ulrich Beck, Anthony Giddens and Scott Lash (see Beck/Giddens/Lash 1996). Among other things, the idea of *comprehensive reflexivity* is essential to this concept, in the sense -as expressed by Ulrich Beck- of "self-application - which simply means: "modernisation undermines modernisation" (Beck 1993a, p. 31), whereby "(...) the standards system of rationality, with its authority and enforcement power, eliminates its own foundations" (ibid., p. 43). It is this -involuntary- repercussion on the premises of modernisation itself that leads to its degeneration in an "era of secondary effects" (Beck 1996). When referred to further education, reflexivity finds its expression in the fact that, following the disintegration of the "grand narrative" (Lyotard), people expect a re-orientation of further education, but generally encounter in "more of the same" (Watzlawick), i.e. they are confronted with ambiguities and a multiplicity of opinions and viewpoints, whereby their need for orientation is not satisfied but rather augmented. Likewise, the syllabi that are adjusted to qualifications can render personal motivation for learning and learning interests "superfluous" and are thus more likely to be detrimental than useful to the "learning society".

What conclusions can be drawn from the Theory of Reflexive Modernisation to evaluate the demands and the development of competencies in the globalised world? There is a clear emerging tendency to develop a comprehensive configuration and design competence (see Rauner 1996). This competence is not only restricted to the mere adjustment to change by imparting "functional" qualifications or partial competencies, but also encompasses "reflexive qualifi-

cations" (see Fig. 1) which, in my opinion, is a more accurate term than the one preferred by Oskar Negt of "alternative key qualifications". As I see it, it does not necessarily clarify things to distinguish between "functional" and "alternative" key qualifications, as Oskar Negt does, although the reference to the necessary socio-political "contents" of such qualifications is certainly justified, given the technocratic bias of many debate contributions (see Gonon 1996). Apart from the fact that such a dichotomised approach is not necessarily inherent to the reality itself, but is nominally placed there by ourselves, in my opinion, even those qualifications defined as "functional" today also escape such a comparison, because they can only be "functional" when they are, at the same time, complemented by reflexive qualifications and are based on comprehensive configuration and design competencies. *The effective socio-political dimension of this competence development thus arises from the core of its very functionality and not –as was thought up to now– from its contrast and negation.* Accordingly, comprehensive design and configuration competencies can only be developed when the key qualifications or competencies are not only "alternative" but also "reflexive" and, ultimately, competence development can only obtain its educational share from the reflexive qualifications. In this sense, Scott Lash refers to the potentially subversive character of competencies charged with this level of reflexivity:

"With the development of the capacity to solve problems, to challenge, etc., (...) a kind of knowledge is acquired that can be used as rational critique to confront the "system". If the modernisation process increasingly presupposes individualisation, then these individuals –who are less subjected to tradition and convention– shall be increasingly free to oppose the consequences of modernisation (Lash 1996, p. 199).

If these reflexive qualifications are to be expected, then learning in the life world (*Lebenswelt*) and at the workplace, and in the organised learning processes themselves should, among other things, be arranged so that the independent search movements are not hindered but rather enabled. These "living" learning processes presuppose methods in which the initiative of the learning process is placed first gradually and then increasingly more on the learners themselves. In this sense, in recent years, and especially in the methodological spectrum, there has been a clear change in the training work conducted at enterprises; they facilitate learning processes where "something" is taught that is "meaningful" to the individual (Rogers), and through which learning "takes place" in a way in which the whole individual learns or can learn.

In the search for a modern educational ideal, the leading concept of a *reflexive modernisation of competence development* is becoming more apparent, which assumes (see Fig. 1)

- that qualification should be structured and developed from *vocational competencies*, but these –paradoxically– should also rely more and more on *extra-vocational competencies* (methodological and social competencies), for the development of which systematic “measures” or “arrangements” should be implemented;
- that education and qualification today should equally prepare individuals to “interact with themselves” (person), to productively “interact with things” (objects, technology, etc.), and to constructively “interact with others” (socialisation) as well as with societal expectations (sociality);
- that training and continuing education –as argued by Ulrich Bech, among others– should strive towards the systematic development of self-competencies –Oskar Negt speaks of “identity competencies”– and the promotion of a biographical competence; and
- finally, that apart from the “functional competencies” in the stricter sense, “reflexive” competencies are systematically gaining importance.

Sufficient lifelong vocational and action competencies can no longer be developed today on the unstable and rapidly changing “terrain” of vocational specialisation alone, and that is why –as Ulrich Beck rightly stresses– “demand-driven qualifications” (have to) undergo a clear relativisation. In fact, the change itself should be incorporated into the qualification, and that is where the orientation of *reflexive modernisation* finds its evident expression in the field of vocational competence development: *People should continue to be willing to change; they should acquire “self-sharpening” qualifications (Bauerdick et al, 1993, p.114), and methodological as well as social competencies (including critical competencies) that are, in this regard, longer-lasting than the anticipated accumulation, or the accumulation during in-service training, of rapidly outdated specialised vocational/professional knowledge.*

In addition to this, there is a further aspect, namely that which could be described as the “biographicalisation” of vocational and occupational learning, because vocational or occupational learning today should increasingly be related to training for a development rationale throughout the individual’s entire lifespan, whereby the traditional contrast between general and vocational education is becoming more and more blurred. In general, adult learning should increasingly take into account that the professional identity in modern society should “hold on” less and less to the “contents” and the “lifelong” aspects of a profession. Gaining in importance are the reflexive skills of individuals, which enable them to flexibly and continuously integrate changes in their professional and private development in new projects (i.e. life designs) of a personal identity. A vocational education system that intends to support these skills and foster “lifelong

learning”, for example, faces the paradoxical task of no longer (only) –as was previously the case– having to develop a “bond to the profession” through technical qualifications, but at the same time also lay down the basis –almost anticipating– the disposition to “let go” of the familiar professional patterns and the bonds to the professional biography. In this regard, Wolfgang Wittwer appeals for a “farewell to the profession as a vital cosmos” (Wittwer 1996, p. 12) and states:

“The mastery of a profession is only acquired with time. (...) Instead of the concept of mastery, there is now a new concept of educational migration. “Migration” becomes a metaphor for the educational and qualification process (Wittwer 1996, p. 9).

Figure 1
 COMPETENCE ORIENTATION OF A REFLEXIVE ADULT EDUCATION
 (see Arnold 1998b)

Reflexive Modernisation of Competence Development				
Thesis: Design and Configuration Competencies instead of Adjustment Competencies				
Reference Point		person	Thing	Sociality
Competence Spectrum	a) functional	Self-competence	Professional competence	Co-operation competence
	b) reflexive	Biographical competence	Methodological competence	Critical competence

1.3 Education – Qualification – Competence

For some time now, a growing number of scholars have been demanding a competence-oriented turning point in the discussion on vocational and adult education (see Albrecht et al 1997; Bergman et al 1996). In particular, what is being promoted is to substitute or “expand” established terms, such as the concept of “qualification” or that of “further education” with that of “competence development” (Weinberg 1996a, p. 214). The supporting argument for proclaiming this conceptual-terminological change is the thesis that this is the only way to adequately conceptualise or to “express with terms and concepts” the changes that are taking place in the social reality (see Erpenbeck 1996 b, p. 9). At the same time, the impression being conveyed is that the established vocational and adult education have missed the newer developments in the sense that they hang on to the terminology and the viewpoints associated with it, instead of adjusting to the terminologically and conceptually transformed realities and being guided towards the “homo competens”, whose situation and behaviour –compared to the traditional image of the “homo oeconomicus”–depend on the development and lifelong updating of their “stock of competencies” (Alaluf/Stroobants 1994, p. 54).

What is to be expected from these recommendations to initiate a conceptual change in vocational and adult education? Is the interested public being confronted by yet a further “plethora of terms” (Faulstich 1996, p.367), that merely represent a new fad for expressing a concept in the arena of the rhetorical exaltation of the specialists? Or do the detectable changes in the social reality of working and learning in fact also suggest that changes have taken place in the deliberations on the issues and topics of vocational and adult education? And what are the implications contained in the competence-oriented turn in vocational and adult learning for defining these special pedagogical (educational) areas as disciplines (see Arnold 1998a), which in the past were marked to a great extent, and maybe even decisively, by the traditional (im)balance between general and vocational training?

The Humboldt *Precedence Theory*, according to which general education, in terms of both time and the ambitious educational contents should take precedence and therefore be subordinated¹ to vocational education, ultimately also set the implicit benchmark for the classical vocational education theories (Kerschesteiner, Spranger, Fischer), against whose background they justified

1 Humboldt’s classical statement in this regard is: “The needs required by life or by each of the trades should be separated and acquired after (!) having completed general education” (quoted by: Dauenhauer/Kluge 1977, p. 205).

the legitimization of their concern solely by comparing the alleged educational expectations of general education. And it was through Theodor Litt, whose precise clarifications and analysis of the one-sidedness of the traditional general education principles with respect to their (im)balanced relationship to the requirements of the world of employment, which prepared the conditions for a critical and self-critical re-determination of the theoretical foundations of vocational education, oriented more on social functions rather than principles. However, it was the fundamental relativisation of the secondary school subject combination, such as was accomplished with the approach of the *Kollegstufe*² developed by Herwig Blankertz in North-Rhine Westphalia (Germany) that brought about the breakthrough towards the definition of a theoretical position of vocational education that had released itself from the implied benchmark function of traditional educational *principles*. Although this “self-liberation” of the pedagogical discourse on vocational education did not increase the distance between vocational education and general educational sciences, it did in fact for the first time, enable the new and “impartial” conceptualisation, both of the subjective and social functions of vocational education, as well as the sustainability of its material and formal educational impact, whereby vocational education, in its subject-oriented re-substantiation (see Brater 1997, among others) was in a position, precisely in educational theory, to align itself with Humboldt, who determined that: “The true aim of human beings (...) is to achieve the highest and most proportionate education with respect to their capacities and as a whole” (quoted by: Benner 1990, p. 48).

The Competence-orientation Thesis and the Issue of its Justification

A review of the existing arguments in favour of a competence-oriented turn in vocational and adult education reaches a critical-dialectical evaluation: on the one hand, the stated arguments confirm the vast expansion of the demands for vocational qualifications and the debordering of job-related training processes as a predominant development trend; however these descriptions are surrounded by an aura of what is “new” and “hitherto ignored”, although numerous debates on vocational and adult education in the past years have been precisely addressing these developments (see Brater et al. 1988; Brater/Bauer 1990; Kaiser 1992; Ott 1995; Rauner 1990; 1996; Reetz 1990). At the same time, there is a disregard of the fact that the now preferred concept of “competence development” is by no means “freely available”, but originated in the most diverse theoretical traditions, which should be first reconstructed and analysed with respect to their compatibility with the current further educational policy and political application of

| 2 The *Kollegstufe* is similar to the A-level system (translator’s note)

the concept (see Feuerstein 1979, among others)³. Something that should not be overlooked is the risk that in rejecting the further education and qualification concepts when taking a competence-oriented turn, one might lose sight of the professional and quality standards, which are closely linked to these traditional concepts. This particularly applies to statements such as those of Staudt/Meier, that “training and further education in the sense of a sheer knowledge transmission, (loses ground) in the face of a comprehensive competence development” (see Staudt/Meier 1996, p.264). Such generalising statements do not properly reflect the reality of the current further educational policy, because one cannot seriously assume that further education which is exclusively reduced to knowledge transmission might correspond to the widespread reality of further education. The same also applies to the statement that the “competence concept” raises the issue of “(...) the self-organisational capability of a given individual compared with other constructs such as knowledge, skills, qualifications, etc.” (Erpenbeck/Heyse 1996a, p. 38), a conclusion which should not be dismissed, but only if other “relevant” concepts for the further education debate of recent years, such as that of education or “identity learning”, are not simply ignored.

From a qualification-related argumentative perspective, more convincing reasons can be put forward to further develop and adapt the concepts of vocational and adult education. If one examines the debates on qualification from their onset to now (see Baethge 1979; Baethge/-Kinsky 1995; Georg/Sattel 1995), tendencies can be observed that point towards higher qualifications in the central segments of the labour market. Likewise, the noticeable growth (as has been documented for years) of the more highly qualified jobs (from 28% in 1985 to 40% in 2010) and the simultaneous decline of less qualified occupations (from 27% to 17%) (Franke/Buttler 1991, p. 116 and Klauder 1993, p. 75) also seem to corroborate the reprofessionalisation tendencies described by industrial sociology. This leads to typical industrial jobs in the core segments of the labour market, which “(...) (are) qualified and (offer) regulation opportunities, even though the stress load is evidently high; they have few passive components and have a high condensation degree of consolidation; nevertheless they are open to regulations on the part of the workers” (Kern/Schumann 1984, p.98). These reprofessionalisation trends are backed by parallel developments in the fields of Society, Applied Technology and Labour Organisation, whose common ground is to assign a greater relevance to the subject or to each individual’s self (Baethge 1991; Harney 1992). In this sense, the arguments in favour of a competence-oriented shift in vocational and adult education bring forward the individualisa-

3 In this historical dispute, there is a difference between the concept of competence and that of key qualification, which is a category that Dieter Mertens had once started to define, but which due to its graphical nature, appeared to be of general effectiveness, and for this reason it was also used as a “projection screen” for all possible types of interpretations.

tion thesis (Beck 1986), whereby the “capacity for the personally responsible design and configuration of new individual professional and life concepts” (Arbeitsgemeinschaft 1995, p. 10) is considered a role model function for the development of future competencies⁴.

These tendencies also lead to a weakening of the old polarity between vocational training and personality development, because in particular, objectives such as “key qualifications” or the capability to “autonomous plan, execute and monitor” as well as “managing insecurity” (Bergmann 1996, p. 246) refer to an educational rationale; they cannot be “generated”, but –as in the case of education– they can only be “facilitated” (see Arnold 1996d). In this regard, Brater/Bauer write:

“Compared to the adjustment requirements, with this autonomy demand on the part of the worker, we indeed encounter a boundary set by principle: autonomy cannot be prescribed from the outside. It cannot be mandatorily enforced; it should be, on principle, linked to the worker’s willingness, free will and individual activity. That is why autonomy cannot necessarily occur, neither in general, nor is it even to be expected. It is neither predictable nor, strictly speaking, “feasible”. Whether this can be implemented or not is highly dependent on the workers’ own drive, on their personality development” (Brater/Bauer 1990, p. 54 et seq.).

In deriving its argumentation from these changing demand situations, the motions for a turn in vocational and adult education take up the arguments of vocational education, which were already verifiable in the mid-1980s, and which especially brought awareness to the fact that such broad potentials on the part of the employees could only be developed if the companies implemented more open training and further education strategies and released themselves from closed didactical conceptions. At the same time, the traditional objective-oriented thinking of the companies (“education as a means to an end”) must be abandoned in

4 In this sense, M. Brater points out in his contribution to the reader *“Kinder der Freiheit”* (Children of Freedom) edited by U. Beck, that in the individualisation society, “the education of the self as the action and orientation centre” (Brater 1997, p.153) becomes the core element of professional skills: “Every young person today should learn, wholly on their own accord, and not depending on anyone else, to lead their own lives; they have to learn and attempt to configure an open process” (ibid). If we follow G.P. Bunk, these subject-oriented competences also involve a fundamental change in the conception of professional education: “If the step from professional skills to professional qualification was still a quantitative one, then the step from professional qualification to professional competence is a qualitative one. Since organisational and planning aspects are included, training the traditional worker involves bringing about a paradigm change. If the drive for action was previously from top to bottom, it can now be from the bottom up. The role of the competent worker has undergone a complete change with respect to the past: from external organisation to self-organisation” (Bunk, 1994, p. 10).

favour of a “releasing” rationale, which at a first glance may appear paradoxical: it is not the new demands as such, but rather the preparation for change –which becomes less and less predictable in terms of its concrete contents– that is the guiding principle for future-oriented vocational training and education. The orientation towards the future is addressed reflexively: the preparatory conveyance of qualifications is replaced by the transmission of “self-sharpening qualifications” (Bauerdick et al. 1993, p. 114).

If one asks about the empirical driving forces of these “generalisations” and “extensions” of vocational education (see Arnold/Dobischat/Ott 1997), it becomes evident that competence demands and the need for qualifications have undergone radical changes in many segments⁵ of company practice. Numerous businesses are faced today with an exasperating and systemic complexity and are thus “compelled” to become engaged with “broader” and at the same time “unpredictable” qualifications and competencies. The preparation for “managing insecurity” (Bergman 1996, p. 246) becomes an essential element of qualification and competence development. The increased complexity can only be strategically configured by companies, even when the workers may have comparatively complex qualifications and competencies and are in a position to “manage the design and configuration” (Herzer et al. 1990, p. 56 et seq.).

Industrial sociologists, who had already predicted an “end of the division of labour” (Kern/Schumann 1984) in the 1980s, find this largely affirmed by the de-standardisation tendencies; they currently recognise in the competence demands that are observable in the working world and in the underlying restructuring of work organisations, the expression of a “subject-oriented rationalisation” (Baethge/Baethge-Kinsky 1995, p. 149 et seq.), and even speak of a “normative subjectivisation of work” (Baethge 1991), a metaphor which Baethge uses to describe a tendency in which the process of modernising remunerated work, especially in the case of higher qualified workers, *does not lead to a reduction but to an enhancement of the professional identity referent that is provided by work*. This is an indication that even the mentioned erosion of the professional principle can by no means prove that it is a trend that equally

5 Although the discussion on the “representativity” of such changes in trends is legitimate, it is ultimately unproductive from a theoretical point of view. The current situation of professional competence development is namely differentiated and disparate, and thus probably cannot be reproduced in a comprehensive conceptualisation (any longer): The pioneers of an innovative business learning culture stand alongside other businesses, whose work organisation forms and the learning opportunities associated with them are rather traditional in their configuration. Thus, empirical evidence is found for both, for progress and for restriction. That is why it is not altogether conducive to merely enquire about the representativity of more innovative models; there is in fact a greater need for analyses of the potential that describe and analyse individual groundbreaking cases, and at the same time, examine their conditions for reproducibility.

encompasses the subjective interpretation patterns and life projects (life designs): "Inwardly one wishes to be committed to the job, to be able to participate and contribute to it as a person and verify one's the own competencies through it." (Baethge 1991, p. 7 et seq.) These are the subjective aspirations of young and adult specialists, who emphatically render ineffective the functional rationality predetermined by business co-operation. This modified or increased identity-significance of work –one "*relates the job to one's self, not one's self to the job*" (ibid. p. 10)– can also be viewed as one of the reasons for the dissemination of newer and more participative production concepts. Although subjectivisation of work very often confronts the occupational system with fundamental challenges, which cannot always be fulfilled, there is, indeed, a positive correspondence between this subjectivisation on one hand and the dissolution of the rigid and parcelled-out activities that can be observed in the working world on the other:

"Companies depend more and more on the qualifications of their workers and their identification with their activity, because in the course of the new rationalisation strategies, there seems to be an increase in working situations which demand from workers and employees the skills of interpretation and power of judgement, as well as a contextualised update of their professional competence, either in the form of monitoring and regulating technological systems in production, or in the context of communication situations involving consultation or supervisory activities when rendering services. It is not easy to decree from above that such workers should make the most of their qualification potential, and it is difficult to control this as well; the best way to achieve this is by making allowances for individual responsibility, competence and status" (ibid. p. 13).

It is these "changes in the type of activities at work" (ibid. p. 15) which characterise the development of the occupational qualification system in the core areas of specialised work. It is not an "end" but the "return of the specialised worker" (Lutz 1990), i.e. the re-strengthening of action competence with a labour content, that quite obviously distinguishes the qualification model in the context of the newer production concepts. However, this tendency can only be considered as a differentiation and not as a refutation of the theory of the erosion of profession and an indication of the unaltered continuity of the hitherto existing professional and labour forms. In fact, the "still rigid vertical and horizontal demarcations between the jobs which are considered professions" (Kern/Sabel 1994, p.606) threaten to stifle the possible expansion and flexibilisation of professional action competencies, since we are striving to expand qualifications in the context of the traditional professional and job system, together with its hierarchical and career models.

Together with the changing competence demands, the subjective element, i.e. the worker's personality as well as his or her capacity for self-guidance and social and methodological competencies, increasingly becomes the core of that which is professional, whereby the traditional boundaries between training with no precise objective on one hand, and utilitarian constricted vocational training on the other, break apart, and the path is paved for a redefinition of the relationship between education and vocational training, as well as the relationship between general educational sciences and occupational education. At the same time, it becomes clearer that the shift in the contents of vocational education towards an *-also-* subject-oriented extradisciplinary and multidisciplinary competence development, cannot assume the traditional suspicion that there is an unchanged and categorically irreconcilable antagonism between individual learning oriented towards the company's objectives on one side, and the personality development demands and the development of critical thinking and judgement on the other hand. Nor can the re-determination of the relationship of education and vocational training take place by frivolously and completely abandoning the pedagogical objectives of vocational training to the market forces, and allowing the subject-driven orientation of vocational training to degenerate into a customer-driven orientation. By no means can we assume that the aspiration to have general education in vocational training has already been completely "overcome" today, because in order to develop critical capacity and "key social qualifications" (Negt 1997, p. 227 et seq.), it is far more necessary to develop additional proposals, and possibly also other didactical arrangements. Nevertheless, the aspirations of the current competence development contain clear educational potentials. This is also, in principle, something that may lead to expect a rapprochement of the two "special" educational sciences, namely general educational science and professional education.

The current debates on the consequences that the new forms of labour organisation have on qualifications clearly show in fact that professional education is still determined by outdated ways of thinking and traditional perception patterns. This is also evidenced by the consistently detectable efforts to represent the new tendencies in the old antagonisms ("education versus qualification") or to make assertions that are equally valid for all the spheres of our strongly differentiated professional and economic life. This urge for generalisation thus becomes a generalisation trap into which part of academic professional education have become ensnared, and for this reason their analytical capacity has been considerably affected (see Geißler/Orthey 1998; Hendrich 1996).

One cannot disregard the fact that these processes do not occur uniforml and simultaneously in all professional groups, sectors and activity areas. There are also segregation and segmentation effects on the labour market development

that, as a result, take an ambivalent course: apart from the mentioned re-professionalisation trends, it also produces an increasing number of “qualification losers” (see Georg/Sattel 1995). A critical-reflexive consideration cannot escape the fact that the debate on competence development and the new production and qualification concepts subliminally still too strongly assume things from the perspective of full employment and a normal professional biography. In contrast, there is also a clear erosion of the professional principle, which is linked to the developments of the labour and qualification markets, and whose identity and competence-oriented strength has clearly waned. Individuals can derive their identity less and less from their career, but rather put together a “collage” from the changing contexts of their work biography over the years that can supply information about themselves and about the development of their competencies. Consequently, the autonomy demands of professional competencies (independence, ability to self-organise, etc.) are to be met by people with increasingly fragile identity and biographical projects –by means of “crafted biographies” (Beck 1993b). Should it be outright dismissed that the arguments in favour of a competence-oriented shift in vocational and adult education apparently only show the other side of the end of labour organised in the form of professions? Might the fragile crafted biography correspond to the competent yet unemployed worker without a profession? This is a constellation we cannot imagine at first in the framework of our vocational training system and tradition, yet we can in the context of business-oriented “Japanese-style” vocational training. Kern and Sabel’s considerations are to be understood in this sense, who see in the rigid professional system (with fixed boundaries) an obstacle to the new forms of work organisation and therefore demand more flexible and elastic forms of work actions. “From this perspective, the special feature of the Japanese system appears to be that it is constructed on the basis of the organisation and not on qualification” (Kern/Sabel 1994, p. 617) – This is its clear argument in favour of a “greater range of action” of professional activity (see Steedmann 1994, p. 43). Peter Grootings points out that the competence model “(is) evidently a central issue, especially in countries where there is an insufficient supply of vocational training, or dissatisfaction with the prevailing system” (Grootings 1994, p. 7), contributes to our impression that the concept of competence is an empty concept, which promises to accomplish an initiation and structuring function, mainly in those countries whose vocational training systems are lesser developed or not as profession-oriented. The question that arises, and which is continuously excluded by the advocates of a competence-oriented shift in vocational and adult learning, is the issue about the unwanted systemic “side effects” that a competence-oriented turn might have in *such* countries –such as in the Federal Republic of Germany– where the vocational and further education systems are mainly structured on the principle of the “profession/career” (or the “apprenticed profession”).

Debordering and Internationalisation as the Basis for Argumentation

The use of the concepts of “competence” and “competence development” as debordering concepts is quite inevitable. The competence-oriented argumentation thus follows a trend which has become more and more characteristic of post-modern societies, namely the “debordering in the field of education” (Kade/Lüders/Hornstein 1991; Lüders/Kade/Hornstein 1995). This debordering implies more than an obvious “shift in the place of learning” (Negt 1994, p. 16). This rather involves tendencies towards changes in professional training and further education that can no longer be described merely as extension and universalisation (e.g. of lifelong learning). In this context, competence-oriented argumentation refers to a triple debordering: Apart from an institutional diversification (adult learning in the most diverse institutions), a “debordering of standards” can be observed, in the sense of a “relativisation of pedagogical principles”. The “didactical debordering processes”, as compared to the traditional model, refer to a surprising multiplicity of reasons and forms of acquisition in adult learning, whereby “(...) social conditions of education and learning are observed, that can no longer be clearly empirically separated from the (pure) pedagogical education and learning conditions. Today, in this inextricable field, it is becoming more and more difficult to determine what adult learning actually really is, what should be added to it and what not” (Kade, 1996, p. 9)⁶.

A fundamental aim of the competence-oriented turn in vocational and adult learning is related to its *institutional* “debordering”: It would be desirable to also acknowledge and make greater use of those institutions that are not learning institutions, and to systematically promote the self-learning processes of adults (Bergmann 1996, p.245; Arbeitsgemeinschaft 1995, p. 70). A “broader perspective” is proposed (Sauer 1996b, p. 4), which is by no means linked to anti-institutional feelings, although these cannot be wholly avoided⁷. Criticism is not directed at the institutionalisation of further education itself, but merely at its lack of flexibility (Weinberg 1996b, p. 6) as well as the fact that “thinking in an insti-

6 Interestingly enough, this debordering and destructuring of adult learning is not paradox free. In fact it seems to appear that access to the society of lifelong learning or further education (see European Commission 1995) is also directly linked with the end of further education of a traditional nature, associated to institutions and professions. This can give rise to the question whether the further education society is characterized by the superficiality of the traditional-style further education.

7 At any rate, there are also oversimplified considerations, such as the issue on the “disorder and (the) conservatism” of the further education debate (Erpenbeck/Heyse 1996, p. 36) or equating “classical further education” and “institution-centred organised learning, aimed at the acquisition of technical/specialised knowledge” (Arbeitsgemeinschaft, 1995, p. 50) – a thesis whose supporters ignore both the debate on open learning in adult education as well as the discussion surrounding the orientation on daily life and life world in adult learning.

tutionalised form" (ibid. p. 10) dominates further education policies and has so far somewhat hindered the timely development of more dynamic and complex forms of further education. Making better use of the informal learning processes that take place daily at the workplace is advocated, particularly because it has been reported that adults acquire about 80% of their competencies "outside of adult educational institutions" (Staudt/Meier 1996, p. 290). These undoubtedly rather problematic estimations certainly document the considerable relevance of "informal learning" and "*en passant*" learning (incidental learning) (Reischmann, 1995) or learning from experience (Gieseke/Siebert 1996). Critical analysis is lacking on the issue of whether the advantages and effectiveness of these learning forms are not precisely rooted in their informality, whereby the intention to render this informal learning effective might end up destroying exactly that which constitutes its productive element. In particular, the possibilities of "opening up" the existing further education system have been insufficiently concretised, and the viewpoint of the "competition" between institutional and informal further education also partly dominates the concept of "complementarity" (see Dauber 1986). Some even expect that the outlined transformations in the field of qualification and competence development may sooner or later also lead to "a questioning of the current further education scenario and the adoption of new forms and structures" (Frank 1996, p. 393). Numerous arguments in favour of a competence-oriented shift confront traditional further education more or less avowedly with the "reproach of stagnation". Moreover, much is generally being spoken about "reviewing the thought structures of further education policies which have prevailed since the times of the *Deutscher Bildungsrat* (German Education Council)" (Sauer 1996a), though without clarifying the details of what significance "public responsibility", "comprehensive coverage", the "professionalism of further education staff" or "nationally accredited certificates" might have for the future in the context of such a changing further education system.

A more differentiated analysis of the competence-oriented argumentation also strengthens the impression that the critical comments on the established further education system also work with a slightly reductionistic understanding of further education, and at the same time create the impression that further education is, in the first place, "(...) aimed at transmitting professional competencies and at the unidirectional dissemination of a systematic and discipline-based curriculum, probably containing knowledge that is as complete as possible in order to comply with the requirements, among other things, for practising a profession" (Erpenbeck/Heyse 1996, p. 32). A more accurate analysis of the adult education debate over the past years admittedly shows that the so-described "segment" of adult learning by no means corresponds to *the* further education.

“Realistic” programmes for adult learning were in fact always considered a mere segment of the field, and there were, and still are, numerous specialists who precisely deny the “educational” character of these offers, since subjectivity, autonomy and “search movements” in this segment did not originally belong to that which the companies considered important – a limitation that is only gradually being overcome in the light of the new demands.

When considering the detailed argumentation of the appeal for a competence-oriented turn in professional and adult education, the recurring argument that is first encountered indicates that “competence” is a category associated to a person or subject (see Erpenpeck/Heyse 1996, p. 33), whereas the concept of qualification defines the necessary success in learning with respect to its demand-driven applicability. It is pointed out that it is precisely the new industrial occupations that urgently demand an “approach which is focused on the individuals and their development capacity” (Moore/Theunissen 1994, p. 74), since the flexibility and commitment expected from an individual are ultimately personal requirements, which are not necessarily linked to a profession or vocational training. “Competencies” are described here as subjective skills, and therefore subjective responsibilities, whereby in fact, it is overlooked that in the international context, the terms competence and qualification are sometimes used as synonyms, or applied even in an opposed conceptual and hierarchical correlation (see Schürch 1996, p. 31). Apart from the synonymical usage, completely opposed correlations between the concepts of “competence” and “qualification” can also be found. Knöchel outlines the point of view developed in the German debate when he states that “competencies consist of qualifications” (Knöchel 1996, p. 16), an interpretation which, on the other side, is by no means arbitrarily followed by researchers on vocational education from other European countries. Matheo Alaluf and Marcelle Stroobants, Belgian researchers on vocational education, define competence as the “substance” of qualification, whereby competencies serve “to certify or verify qualifications” (Alaluf /Stroobants 1994, p. 57). These conceptual ambiguities detract from the credibility of the allegations in favour of a competence-oriented paradigm change.⁸ This especially applies to the statement that “the transition from qualifications to competence is taking place throughout Western Europe, and the concept of competence provides better chances than the concept of qualification for developing a European instrument to promote the mobility and transparency of the labour market” (Grootings 1994, p. 5f).

8 The British discussion also has a “narrow interpretation of the concept of competence” as its basis (Parkes 1994, p. 27) and assumes that certified competences constitute qualifications (Mardsen 1994, p. 24).

On the Issue of the Topicality of the Argumentation

The competence-oriented delimitations of the qualification concept are also quite unconvincing because they operate with a backward concept of professional-pedagogical qualifications, i.e. understanding qualification as it might have been typical in the seventies (Baethge 1980), but not in the present-day professional-pedagogical debate. This particularly applies to assertions such as that the concept of qualification is restricted to a “mere transmission of skills that are directly linked to an activity” (Baitsch 1996) or to “concentrating on the circumstances” as well as to the “cognitive aspects” (Erpenbeck 1996a; b; Erpenbeck/Heyse 1996), which is why such a restricted point of view should be counterbalanced with a “comprehensive concept of competence”, to which everything can be ascribed that one had overlooked in the more current discussion on qualifications in vocational and adult learning. That is why it is not surprising, particularly when speaking about a “broader and new perspective in the development of human resources” which puts “a comprehensive competence development as the focus of its efforts” (Arbeitsgemeinschaft 1995, p. 8) that the vocational and adult learning debate is in fact “preaching to the converted”. This is also applicable to the newly discovered conception of a method-oriented competence development (ibid., p. 41), with the indication that “self-organised learning and self-guided processes (...) (constitute) a permanent feature of all competence development methods” (Erpenbeck/Heyse 1996, p. 36) – and this is also something that the professional-pedagogical debate on action-oriented and comprehensive learning has long since been aware of (see Herzer et al. 1990; Lipsmeier 1992; Ott 1995).

Conclusions

Although the protagonists of a competence-oriented turn in the further education policy present a relevant and updated description of the new demands in the field of modern industrial work and technical development –which are not altogether original from the professional and pedagogical point of view– this is however *quite inordinately restricted to the concept of competence*. This could be a summary of the conclusions on the reconstruction that has been carried out thus far on the competence-oriented argumentation (see details in Arnold 1997b). On the other hand, as was suggested on several occasions, it cannot escape a closer examination that a competence-oriented argumentation:

- works with a “outdated” qualification concept,
- when describing the “new” further education, ignores risk analyses to a large extent (e.g. “expropriation of informal learning”, “erosion of the profession”, “erosion of public responsibility) and

- in general, only incidentally takes up the adult and vocational training pedagogical debate.

It is particularly this latter point of view that gives rise to critical examination, because it is quite clear that in the case of the newer *competence-oriented discourse*, this first has to do with a discourse on human resources and occupational psychology (especially Bergmann et al. 1996); the supporters of vocational training and adult education are a clear minority among the current “contributors” (Bunk 1994; Weinberg 1996a; b; c), which is a pity insofar as both disciplines –as has already been mentioned– can take a retrospective look at the discourses whereas much of what is being discussed today as “new”, had already been anticipated.

1.4. The Reflexivity of Competence Development

The following chapter describes the external and internal tendencies pertaining to the change in competence development. The “external” tendencies are the result, on one side, of the gradual disappearance of the profession as a guiding category of an individual’s biography and, on the other, of having to strike a balance between the individual’s and the company’s interests and expectations. It shall be shown that, together with this disappearance of the profession, part of the stability and the protection that professional biographies used to provide also gets lost. At the same time, the social consequences of the development from the exclusivity of profession to professions with key qualifications will be described, and arguments in favour of a vocational training policy will be presented, that may follow the middle course between the link to an identity-bestowing concept of profession and work on one hand, and its necessary flexibilisation on the other. The compromise lines of such a framework of vocational training policies will be outlined, from which the companies and their social corporations may also derive their orientations. The contribution on “internal” tendencies refers to the new demands placed on the speciality area of occupational competencies. These are no longer exclusively characterised by material knowledge (“knowledge-storing”), but rather increasingly require that employees should be skilled in “reflexive knowledge forms” such as methodological knowledge (...methods for obtaining, presenting and communicating information), reflexive knowledge (...how to question, criticise, substantiate and evaluate consequences) and personality knowledge (...how to recognise one’s own role, part and interpretations in interactions). A description of how these demands lead to a clear trend towards the development of comprehensive configuration competencies, which present businesses with new challenges concern-

ing the way in which to train and prepare their personnel, and in regards to their leadership culture (see Arnold 2000a).

External Trends

Over the past 20 years, the object of vocational and economic education⁹ has undergone a dramatic change, and this has also radically changed their concepts and therefore their self-understanding and the issues involving their practical relevance. Whereas for both pedagogical disciplines, the “profession” was, for many decades, one of the guiding categories in their endeavour to describe, analyse and predict the development of qualifications and competencies in modern societies, the transformations that have been occurring at the workplace and the growing discontinuity of work biographies are increasingly challenging the applicability of this category. The issue today is the “erosion” or even the “end of the profession”, because although people in modern societies still continue to opt for a profession, this can hardly guarantee lifelong certainty and perspectives. People pursue a profession today in order to have an admission ticket into the gainful employment system where the demands, upheavals and opportunities of the companies are the ones that ultimately determine what stations, job-related requirements, and risks of loss with regard to their own competence development, might be encountered along one’s own work biography. Companies are, therefore, becoming more and more clearly the true configuration principle of professional development: Although people take up professions, it is the companies that are increasingly determining their work careers, and this depends on whether and to what extent they have also learned to “let go” of these professions, to acknowledge the new company requirements and continue developing their competencies and professional identities.

Max Frisch’s quotation that “Sooner or later we all invent a story which we consider our life” refers us to the underlying identity problem of these developments, or specifically, to that of the professional identity of the “flexible man”

9 “Vocational education” and “economic education” both deal with the objectives, contents, conditions and forms of vocational education and training in the industrial and technical fields (= vocational education) or in the business or service sectors (= economic education), and can therefore be used as synonyms. However, it cannot be overlooked that economic education, due to its comparatively less heterogeneous professional field in the stricter sense, has been able to advance towards a more differentiated synthesis and empirical clarification involving special didactical issues. In contrast, I have the impression that vocational education has elaborated more substantially upon issues involving the relevance of technological change for professions and professional training in the business context, as has been clearly demonstrated, among other things, by its contributions to the development of economic education as an autonomous field. On the other hand and until recent years, the major exclusion of issues involving adult education was characteristic for both professional disciplines.

(Sennett 1998): His identity has a permanently transient and liquid quality. He might still be able to respond to what he “is” professionally by describing his current professional function, but he finds it more and more difficult to plausibly integrate this present status with that which took him there, or even what shall become of him, in a conception that establishes a logical link to a past, present and future. The elements of chance, external steering and fragility of the current work biographies have irrevocably replaced those which used to confer guidance, orientation and certainty to professional careers in the past. Today’s workers no longer follow an inner vocational call; they follow the usually barely anticipatable calls of the competencies required by the businesses. Their working life is not the biography developed from a professional concept but rather a permanent interaction with uncertainty, and with the loss and shift of competencies. It is no longer the stability of a professional construct –which at least used to guide professional identity– but rather the instability of the businesses’ demands, which act as a determining factor on the decisions regarding individual work biographies. Thus considered, the current developments in the labour markets are characterised by the disappearance of the intermediate category of the “profession” as the idealised construction of a framework that used to guarantee comprehensive action competencies, which company requirements had to adjust to. In fact, the “flexible man” today has to adjust immediately, and to a certain extent relentlessly, to the competence requirements of the companies the way they are, unless he wishes to renounce the opportunity –even when discontinuously– of having gainful employment.

It can certainly be argued that most people have always had to adapt themselves to the constraints of company requirements and that already in Kerschesteiner’s time, the concept of profession was more of an idealisation of the tradesmanship of the past than an adequate description of the predominating labour reality in society. At any rate, it cannot be ignored that up to 70% of each generation has had vocational training in Germany under the Dual System – a fact that contributed to establishing a professionalism that could also lay down the basis for a certain “autonomy” of the trained professional, with respect to the restrictive parcelling of the occupational activities. Due to this professionalism, even skilled workers assigned to tasks not in line with their qualifications were not easily persuaded to perform deprofessionalised functions for an unlimited period of time. Initially it was mainly the trade unions that defended professionalism and vehemently battled against the concepts of reduced vocational training, because in guaranteeing comprehensive vocational training that was not driven by the temporary competence demands of the businesses, they saw an unwavering acknowledgement of the value of the market position and market value of the labour force. Only qualified workers –that was the socio-political rationale of the argument– could in fact be in a position to constitute an effective

countervailing power against the permanently changing and partial competence requirements of the businesses and effectively prevent their devaluation. In the end, professionalism guided by the professional principle is a basic element for social integration and for the emergence of the middle class – an argument which, in view of the international comparisons, should not be wholly dismissed.

The current situation is paradoxically marked by two diametrically opposed tendencies, and today, there are further social forces that support professionalism –although with a changed content: on one hand, the profession has, to a great extent, lost its function of providing a framework for the identity and curriculum vitae, and professional biographies today –as has already been mentioned– are characterised more by releasing than by holding on to responsibilities and competencies once acquired in a working context. On the other hand, “reprofessionalisation” tendencies (Kern/Schuman 1984) can be observed. However, these are characterised more by professional planning, co-ordination and problem-solving functions of qualified employment, which to a certain extent constitute a superordinate responsibility, that is not only the result of professional expertise but also of key qualifications, i.e. methodological and social skills. It is not quite clear whether and to what extent comparable social integration effects might arise from this “new professionalism” (Kutscha 1992), and if these can reinforce both the market value and the social negotiating power of the employees. At the core of such considerations is the question: What is the impact of the generalisation of occupational competencies (in the sense of a growing relevance of key qualifications) on the social integration of those who gain their status, loyalty and biographical confidence from the fact that they possess comprehensive qualifications to assume specialised functions, if the specialisation issue loses relative society –and that is the question that follows– whose coherence and integration has mainly resulted from exclusivity professionalism when this threatens to yield to key qualifications professionalism? importance in the professional development? What shall become of a Within the scope of such a “generalisation” of vocational training, is it possible to really and substantially justify and conceive this as “training to become a citizen” (Kerschensteiner), even if not so much in the sense of an authoritative state as envisioned by Kerschensteiner, but namely as a subject who is capable of configuring and participating? Or are the bold demands for self-guidance and autonomous competence merely the rhetorical disguise of a development that, at the same time, precisely removes the foundation for the emergence of such skills?

Such arguments may seem rather helpless and backwards in the view of a globalisation, that also in the field of vocational training leads, internationally, to the dissemination of models that weaken the exclusivity professionalism of the professional competence development. The competency-based approach of

occupational competence development¹⁰ should also be mentioned, which conditions what competencies should be acquired by an individual almost exclusively to the demands of the labour markets. Instead of the idea of “complete” profiles of professional requirements, composed of numerous differentiated partial competencies which only jointly constitute an occupational competence, the idea of a department store concept with modularised competencies arises, which –depending on the needs of the moment and the regional and entrepreneurial demands– can be assembled together into marketable, i.e. sought after competencies “bundles”. The objective at the forefront is to guarantee the “adjustment” of the competence supply to the companies, and not so much the aspiration to make it possible for an individual to develop a comprehensive occupational competence that is largely independent from the labour market situations. Instead of the “profession”, the competency-based approach replaces the concept of patchwork, which is complemented and framed by the concept of key qualifications that prepares an individual to act, i.e. to autonomously and co-operatively plan, execute and evaluate solutions to problems.

How is this concept of professionalism to be regarded, which consists of comprehensive key qualifications and the respective accumulation of competencies that are dependent on the times and the demands? Shall companies actually be able to “guarantee” in the middle- and long-term the quality standards of their products and issues, if competence development becomes destandardised and, therefore, increasingly starts to dissolve the exclusiveness principle of the Vocational Training Act¹¹? Are we facing a Japanisation of occupational competence development, where the individual is ultimately bound to the company and there is no internal bond to a profession or to the experience that conveys identity and stability when acquiring a broad occupational action competence? Moreover: what are the consequences and needs that arise with respect to designing personnel development in companies in the light of such deprofessionalisation and business-oriented tendencies in the area of human resources?

My impression is that due to the existing cultural differences, a Japanisation of our training and further education systems is not to be expected. That is why we might be largely spared the repercussions on the education and social systems that occurred in Japan (e.g. extreme shortlisting, segmentation of the labour markets), provided that those who play a role in vocational training (the state, employers, employees) manage to pursue a vocational training policy that effectively

10 This approach is supported by the International Labour Organisation (ILO), among others, and plays a growing role in the worldwide debate on the development of professional training strategies.

11 The principle of exclusiveness in the Vocational Training Act “protects” the right to acquire an independent professional action competence insofar as it is stipulated by law that in principle, training may only be provided for recognised technical professions.

forestalls parcelling the development of competencies. In my opinion, such a policy should take the middle course between the bond to the professional concept on one hand and its flexibilisation on the other, and this middle course should, at the same time, become a configuration principle that fully pervades education and further training. To this effect, the state and the economy should come to an agreement, whereby the state, federal government and federal states should continue to make the general legal framework more flexible (e.g. educational framework plans, curricula, syllabi), and the economy should be more and more willing to gear its further education and training programmes to the cross-company standards and to the standards of the occupational qualification system. This middle course between occupational and competence-driven orientation for vocational training policy could correspond with the following basic structure:

Figure 2
MIDDLE COURSE BETWEEN OCCUPATIONAL
AND COMPETENCE-DRIVEN ORIENTATION

	State (Federal Government and Federal States)	Workers/ Employees (Unions)	Employers (Companies)
Guiding Interests	Cross-company Comprehensive training (Professionalism)	Cross-company applicability Employability	Flexibility (in regards to both time and con- tents) Bond with busi- ness/company
Compromise Lines in Training and Further Education	Publicly accredited vocational training (principle of exclusivity) makes the general framework more flexible in accordance with the following division into three parts:	The “company’s sovereignty” (“principle of subsidiarity”) becomes integrated with its activities in the following framework:	
	<ul style="list-style-type: none"> • 1/3 broad vocational and general basic education (including training in and promotion of methodological and social competencies) • 1/3 vocational and technical specialisation within the scope of the mandatory requirements of the training regulations • 1/3 vocational specialisation according to the specific regional and corporate competence requirements (“corporate competence modules”) 	<ul style="list-style-type: none"> • Co-ordinating and allocating the corporate competence modules with the cross-company vocational training system, accredited by vocational education regulations • Co-ordinating and aligning the corporate competence modules with a corporate further education system that is regulated by further education provisions and “degrees” of continuing education and training to be defined. 	

Internal Trends

Internal trends towards change can also be observed in the fields of occupational and professional competence development, which are characterised, as sociologist Ulrich Beck wrote, by a “loss of certainty” (Beck 1996, p. 21). At another point he adds: “(...) the normal working (employer-employee) relationship starts to dissolve both in terms of the biography and the enterprise, and the security of the welfare state economy is replaced by an economy marked by insecurity and debordering” (Beck 1999, p. 58). These trends lead to a re-evaluation of the professions and their contents. In this regard, in 1988, Michael Brater et. al already supported the strong thesis that “today, the demands of the working world are changing to demands on the free development of the personality (...)” and that “(...) vocational training, precisely because it is oriented towards the demands of the working world, should become more and more general personality training. (...) Vocational training is becoming the place where the essential contents of the old ‘general knowledge concept’ can be acquired” (Brater et. al 1988, p. 44 et seq.). In conjunction with the material forms of knowledge, the reflexive forms of knowledge are gaining fundamental importance. Even though the modern information and knowledge society continues to produce escalating quantities of *stored cumulative knowledge (change)* (knowledge for storing facts, theories, data, etc.), this knowledge, however, can be increasingly stored and retrieved “outside” the individuals, and thus it becomes increasingly questionable that education is only understood and examined in material terms, as “educational matter/material”, even when it is precisely classroom forms education and further training that paradoxically insist in doing so. Conversely, the “reflexive” forms of knowledge (not know-how but know-how-to-know) are gaining importance, among which I include *methodological knowledge* (knowledge about processes for acquiring, presenting and communicating information), *reflexive knowledge* (knowledge of how to challenge, criticise, justify and assess the consequences of a concept), as well as *personality knowledge* (knowledge of how to recognise one’s own participation and interpretation in interactions). It is needless to emphasise, that most of the educational institutions have not yet begun to take this necessary change into account; planning and teaching takes place predominantly in material and not in reflexive knowledge categories.

The developments outlined here lead to new learning objectives and contents. Whereas traditional professional and adult education have been characterised for decades by the perspective of an irreconcilable opposition between the economical principle and the pedagogical principle, today a paradoxical tendency can be observed in the coincidence of these diametrically opposed principles. In other words, given the new type of work in society, the individual’s self-realisation demands, in the context of learning-relevant labour relationships, need

Figure 3
 FROM KNOW-HOW TO KNOW-HOW-TO-KNOW
 (Arnold/Schüßler 1998, p. 61)

Material Knowledge (Know-how)	Reflexive knowledge (Know-how-to-know)		
<p><i>Cumulative Knowledge</i> (Knowledge for storing facts, theories, data, etc.)</p>	<p><i>Methodological Knowledge</i> (Knowledge about processes for acquiring, presenting and communicating information)</p>	<p><i>Reflexive Knowledge</i> (Knowledge of how to challenge, criticise, justify and assess the consequences of a concept)</p>	<p><i>Personality Knowledge</i> (Knowledge of how to recognise one's own participation and interpretation in interactions)</p>

not be inevitably and irreconcilably opposed to the enterprise's qualification requirements. The above-mentioned "reflexive modernisation" (Beck et. al 1996) often goes hand in hand with the growing disciplinary importance of extra-disciplinary learning in the dimension of occupational-entrepreneurial qualifications. The technical aspects of specialised training are thus transformed, and this is often a fully-ignored tendency: *In the context of systemic rationalisation processes, subjects must learn to manage technical and specialised qualifications differently.* These are increasingly losing their character of facticity and transient finality; specialised knowledge is rather constituted through self-exploration, acquisition and problem-solving activities on the part of the employee who is going through the learning process.

These tendencies are commented on with great scepticism and reserve by the established discourses of vocational education: One of the reasons for this standpoint can surely be seen in the fact that educational theories up to now have not departed from the "versus paradigm", according to which education and qualification are two diametrically opposed and all-excluding forms of subjective competencies. That is why the training efforts of enterprises generally fall under the profane suspicion that they can, at the most, implement a functional subjectivity, whereas autonomy, self-activity, and critical thought are conceptualised as subjective skills that cannot be reconciled with the rationale of business qualifications policies. It is almost impossible to follow this unification of "purpose" and "functionalisation" which, despite being quite widespread, is not convincingly sustained from the point of view of educational theory, because the

implicit paradox of the more modern qualification strategies are overlooked – and this lies in the fact that very often during the learning process, the purpose of the learning contents is not at the forefront (any more), but rather the question as to *how* the learner organises and enhances the acquired knowledge and what formal skills can be gained in the course of a purpose-oriented yet at the same time self-organised acquisition process. The global objection to the functionalisation of vocationally-oriented continuing education is, in essence, implicitly based on the equation of “purpose-free” and “subject-oriented” education, and thus ties in with the historically transmitted –yet ultimately ideological– opposition between general education and occupational training.

The realisation of these structurally-focused learning processes admittedly implies didactics that have released themselves from the illusions of domination or feasibility. These live learning didactics are based on the concept that the evolutionary developments that led from single-cell organisms to human beings also apply to the learning processes and personal growth of human beings, i.e. both learning and evolution take place in a self-organised manner. And “teaching” is not a mandatory requirement for learning; on the contrary, “teaching” can also hinder learning.

This vision of learning –as a self-organised evolutionary process– has far-reaching consequences. The teachers are initially “relieved”: Although learning also depends on their efforts, it does not depend exclusively on them, and maybe not even in the first place. In fact, learning takes place without teaching, and sometimes something different is learnt from that which was taught. In other words, with this non-trivialising approach –which is probably the first– learning turns out to be an extremely subjective process, the course and results of which largely depend on the subjective search movements of the learners, their own structures, their learning styles and their learning projects. With this realistic perspective, the aspirations of “teaching” are reduced to an impetus-generating and facilitating model. “Teachers (i.e. Facilitators)” arrange learning environments and options by applying methods that utilise an active and self-exploring approach to processing and resolving problems.

This necessitates a “facilitation didactic” that, during the planning and design stages of the professional-entrepreneurial learning processes, ask first and foremost about the possible self-acquisition and self-exploration activities of the respective learners. Specialised knowledge is thus no longer codified out of context into educational and training regulations. Instead, and already during the planning stage, it is transformed into complex cues and terms of reference, for whose definition the following question is systematically used as a point of departure: If, and to what extent, can learners acquire the necessary technical/spe-

cialised contents on their own? In other words, consistent *vocational training based on facilitation didactics* systematically starts from the paradoxical premise of a new learning culture that can be expressed in the words of Maria Montessori: "Help me do it on my own!"

Change Competence. Configuring Change and Overcoming Crises

In recent years, the vocational training debate has increasingly evolved towards a debate on competencies. The whole issue began with the concept of key qualifications, which basically met the concern of paying more attention to the development of broader action competencies. Namely, there has been, and still is a growing unrest regarding the type of educational practice characterised by transmitting knowledge in primarily frontal teaching learning cultures. The involuntary side effects of such "knowledge-fattening" became more and more evident, and were expressed in the fact that individuals who had been socialised in this way could develop little confidence in their own capacities because they were used to the fact that their learning was, first and foremost, an adaptation learning or –as Klaus Holzkamp named it– "defensive learning", i.e. learning to avoid disadvantages (e.g. missing out on an academic degree). Is it surprising that the learning attitudes that are generated in this way are of a rather passive nature? Is it surprising that "adaptation learners" have developed little feeling that it is they who matter, that they cannot be only receptacles but also producers of knowledge and solutions to problems? And is it surprising that those who were trained this way later lack the sufficient motivation, self-competencies and strategies to creatively modify and continue to develop their working environment?

In 1976, Erich Fromm, four years before his death, already radically criticised the "having mode" that determines our learning cultures. In his book "To have or to be", he writes: "Students in the having mode must have but one aim: to hold onto what they have learnt, either by entrusting it firmly to their memories or by carefully keeping their notes. They do not need to produce or create anything new. In fact, the "having type" feels disquieted by new ideas or thoughts on their subject area, because that which is new challenges the total sum of information that they already possess. To individuals to whom "having" is the main form of their relationship to the world, the thoughts they cannot take note of easily and retain are intimidating, as is everything else that grows, changes and, therefore, escapes their control" (Fromm 1976, p. 38 et seq.). This statement is a very strong reference to the fact that our prevailing learning cultures are not only the expression of a society where education is understood and staged as a sort of "possession", but

points out that this “having”-oriented learning corresponds with a psychostructure that is both the result and the condition of how a having-oriented life functions.