



Corporate Human Resource Development I: From Organisation to System

inWent

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Impressum

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InWEnt in Brief

InWEnt stands for the development of human resources and organisations within the framework of international cooperation. InWEnt's range of services caters to skilled and managerial staff as well as decision makers from businesses, politics, administrations and civil societies worldwide. Each year, some 55,000 persons participate in our measures.

Programmes and measures at InWEnt aim at promoting change competencies on three levels: They strengthen the individual's executive competencies, increase the performance of companies, organisations and administrations, and at the political level improve decision-making skills and the capacity to act. The methodological tools comprise modules and can be adapted to meet changing requirements in order to provide solutions. Apart from face-to-face situations in measures offering training, exchange of experience and dialog, emphasis is on e-learning-assisted networking. InWEnt cooperates equally with partners from developing, transition and industrialised countries.

InWEnt's shareholders comprise the Federal Republic of Germany, represented by the Federal Ministry for Economic Cooperation and Development (BMZ), the Carl Duisberg Gesellschaft that represents the business community, and the German Foundation for International Development that represents the Länder (German federal states).

InWEnt was established in 2002 through the merger of Carl Duisberg Gesellschaft (CDG) and the German Foundation for International Development (DSE).

Division 4.01 of InWEnt is seated in Mannheim and conducts on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ) advanced training programmes. Under the banner of "sustainable development", its work focuses on questions of technology cooperation, system development and management in the field of technical and vocational education and training. Its dialog and training programmes are targeted at decision-makers from the public and private sectors, junior managers and multipliers from vocational training systems.



Introduction

From 2003 onwards, InWEnt's Division "Technological Cooperation, System Development and Management in Vocational Training" is to present a series on everyday practice in vocational training.

The intention of this series is described in the title itself ("Beiträge aus der Praxis der beruflichen Bildung" = series on everyday practice in vocational training). The division aims to support its programmes of international personnel development in the above-mentioned areas with technical documentation in both printed and electronic form.

These reports

- > originate in the partner countries, taking into account specific situational demand
- > will be tested with and for experts in vocational training in the partner countries in conjunction with respective practice-oriented training programmes on offer, and
- > with a view to global learning, will be improved and adapted prior to publication according to the recommendations of the partners or the results of the pilot events.

Thus, the Division "Technological Cooperation, System Development and Management in Vocational Training" is applying the requirements of InWEnt's training programme to its own products in the above faculties: i.e. these can only be as good as their practical relevance for the experts of vocational training systems in the partner countries.

To this effect, we look forward to critical and constructive feedback from all readers and users of these special series.

Our thanks go to Prof. Dr. Rolf Arnold who made invaluable contributions to these activities.

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1. What is a Company?

The companies are a part of our society. For this reason, all social change processes, such as the change in values or the trend towards the so-called "experience society" or "knowledge society", are showing up in changing demands for new qualifications and in-company-learning didactics. For a long time now, companies that most strongly enhanced innovation and change had to abandon the traditional patterns and forms of "qualification" and to implement didactically broadened approaches to corporate basic and further training. At the same time, there are more and more efforts made to look for possibilities and forms of organisational learning i.e. systemic learning that can trigger and support corporate change processes. Thus, learning is no longer considered to be a process targeting only separate individuals. In many places, the in-company training presents itself as an innovative i.e. innovation-orientated learning field, the dynamics of which arise not only from essential changes in corporate competition relationships, but also from the companies' work organisation itself.

Typical of these change processes is an extremely increased flexibility. This flexibility has to be supported and facilitated by an adequate corporate qualification strategy: These days, companies need more and more employees with self-organisation competencies i.e. key qualifications in the broader sense. These new requirements entail fundamental demands on a modern corporate human resource development.

Companies are systems that

- > on the one hand, pursue a common organisation purpose and
- > on the other hand, are "held together" by a network of routines, habits and common mindsets.
- > At the same time, companies stand for a more complex form of production based on the division of labour, the advantage of which results from a synergetic combination of different competence profiles. Thus, it can be stated that

Companies are social expressions for production based on the division of labour.

This is the reason why the companies also represent the respective state of the technical and social development of a country: The more complex the techniques and procedures applied in production are, the stronger the urge to establish a cooperation based on labour division, and the more prevailing the idea of professional competence as being the springboard for "making a career for oneself", the stronger people will strive to improve their living conditions and level of income through qualified work. It is true that we speak of a company even if it is a small workshop that in the extreme may only consist of one worker, but this is a rather exceptional situation. In general, companies represent more complex cooperation forms interlinking several people. These forms can be subdivided into different categories: smallest business (1-2 employees), small business (up to 5 employees), medium-sized business (up to 50 employees), bigger and large business (hundreds or even thousands of employees).

"Technology" has always been a fundamental yardstick for corporate work organisation and therefore for professional training as well. This yardstick especially applied to the vocational training in trades and technology. By disseminating the new information technologies, technology has become an important force for structuring and changing occupations in commerce and administration as well. On this subject, Winfried Hacker, an industry psychologist from Dresden, comments as follows:

"Hierarchies that are more flat require more independence (empowerment) of the employees than entrepreneurial behaviour. Concepts such as pro-organisational behaviour, organisational citizenship behaviour and personnel initiative are underlying the developments in the working world. In-company

behaviour in form of innovative action thus contrasts to formerly repetitive work actions. With this innovative action arise broader education goals. Finally, the change in work will also provoke an expanded in-company cooperation of the employees; SMB (=small and medium-sized business) at times will even include between-companies cooperations or even networks of suppliers, producers and customers." (Hacker 2005, p. 20).

The technical developments therefore result in new openings for corporate networks and (virtual) cooperations that go beyond the traditional company boundaries. The company interlinks with other systems, whereby the dividing line between supplier and buyer becomes blurred. The corporate cooperation is being increasingly replaced by forms of project-based cooperations between in-company and external actors. Thus, the company of the future will not be definable any longer by buildings, organigrams or the local concentration of several workforces on one production site – decisive will be the ownership of the final product resulting from overall network projects. The motor in a new car may come from Honda or another global player of the car industry, but the most important factor will be the label under which the different components have been integrated and marketed as a total product.

The application of new technologies has also fundamentally changed the "usual" forms of corporate work organisations in many fields. In particular the possibilities of knowledge accumulation, documentation, and application have changed: Today it is possible to use intranets to "file" and revise the know-how necessary for the production and process-shaping in the company. Using the intranet ensures that all employees have access to this digitally gathered knowledge. More and more companies strive to develop such possibilities of a well-directed knowledge management. The staff knowledge will gradually change into organisational knowledge. By means of this, the corporate organisations transform increasingly from relatively well-structured corporate struc-

tures into interweaving networks with blurred boundaries. Eventually, it will also become increasingly difficult to define exactly who belongs to the company and where the company has its boundaries. There is a close networking of suppliers and customers, the latter sometimes have access to essential areas of the intranet. If a company increasingly uses this net for corporate communication, it will not be necessary any longer that all the participants communicating via intranet have to be in the same building at a fixed time. The use of new technologies thus does not only lead to a blurring of boundaries within the company context but also to a virtualisation of work relationships. The consequences on future job offers cannot be foreseen yet:

"The net replaces the employee: Via telephone wires, digital data will be transmitted – thereby doing without the spoken word. The computer transforms from a pure calculator into a multidimensional communication facility. Telephone wires and personal computer – the first being one hundred years old, the other scarcely one generation – the interlinking of both in the internet and in other forms of electronic data transmission will foster technology and rationalisation in new dimensions. Certainly, new professions will be created that have not existed before: designers who shape homepages; programmers who develop software; and consultants who explain how to use the net for individual needs. However, the idea that multimedia can solve the job creation problems is a myth. (...) Those who still complete a training to become travel agents, who still consider the training as a bank clerk as crisis-proof, those will have a rude awakening. Only those who take the bull by the horns and grasp the structural change as a chance and not as a danger will prosper in the digital world" (Jung 1997, p. 250).

Definition of the Word "Technology"

"Technology" stands for the total of measures and procedures that purposefully use and assess the possibilities available by law of nature.

Beside this logic of purpose rationality, a further dimension of technology has come to the fore in the last decades through the application of information technologies. Hans Lenk comments on this as follows:

Extensive machine technology and bold technical material constructions seem no longer to be the symbols of the technological age, but – beside the aforementioned expansion of technical procedures – the continuous rational systematisation through information processing and production automation has become the predominant characteristic of our world. The information technology has become the typical mark of our time" (Lenk 1994, p. 17).

In this sense, it can be spoken of increasing network and self-direction potentials in the field of information technology: Technology is not only the application of law of nature knowledge but rather "lives by" the manifold possibilities of complex information networks that exceed the assimilation capacity and the speed of reaction of the human brain to a considerable degree.

In order to prevent that technology application will only develop according to technical possibilities and economic stipulations, it is necessary to initiate those competences within a basic and further training that enable the staff to actively take part in adjusting the workplaces when it comes to technical innovations. The underlying approach is that technical solutions that turn out to be successful at the workplace, are not only the result of technical

constraints, but also the result of social balance of power. In those places where highly qualified people do not only have technical skills but are also willing and able to struggle for the consideration of their qualifications, there will – according to the socio-technical explanation approach – eventually emerge other workplaces compared to job markets that have to do with a big number of job seekers with lower qualifications. This is the only explanation why the same technical possibilities available in different countries and regions lead to different workplaces. In this context, it is often referred to the works of Burkhard Lutz, an industry sociologist who – on the basis of comparative studies on the workforce recruitment in French and German industry companies – found out already in the 70ies that,

"(...) the German and French companies produce the same products under the same or similar technical conditions with totally different workforce structures, and this without obvious discrepancies in the profitability and productivity. These totally different workforce structures correspond to totally different forms of corporate and work organisations. There is obviously a close correlation between the level of vocational qualification of the staff on the one hand and the level of hierarchical and functional division of labour in the company on the other hand: In comparison to the French companies, the German counterparts – having in general a large number of equally or similarly qualified employees due to the dual system of vocational training – always had a far less developed hierarchy and a far less functional division of labour and comparatively greater autonomy and richer work contents at most of the workplaces. Incidentally, this also means that the German staff was more qualified simply because the greater autonomy at work offered much more chances to continuously learn during the work process and to develop new competencies while coping with recurrent problems" (Lutz 1979, p.9).

In order to adequately assess the driving force of technology and what it means to the corporate

work organisation, one has to start from a socio-technical concept that adequately takes the correlation of social situations and technical possibilities into account. At the same time, technology as such has to be conceived in a different way as well. Formerly, the debate was marked by a technology critique that basically attributed a decomposition effect to technology and apodictically negated any positive effects on humanity or autonomy. The development of technology applications in the last two decades has been quite ambivalent. You find proof of both: the effect of decomposition and dequalification or even release on the one hand and

on the other hand, the effect of higher qualifications and autonomy. Especially the change to a so-called "new industry technology" did in fact provide a broader field for developing complex responsibility and competence patterns for a company's staff.

In contrast to the traditional industry technology marked by belt production, long material flow, and subtly differentiated division of labour, the latest industrial processing procedures show a greater flexibility and a distinctly reduced labour division specialisation. To the fore is increasingly coming the integrative and cooper-

Illustration 1: Development of Technology Application, Professional Structures and Competence Development

	Manual technology	Traditional industry technology	Modern industry technology
Production organisation	<ul style="list-style-type: none"> > Special orders > Batch production 	<ul style="list-style-type: none"> > Mass production > Assembly line > Long material flow 	<ul style="list-style-type: none"> > Flexible production > C-procedures, robots > „Just-in-time“-production
Division of labour	<ul style="list-style-type: none"> > Craftsmen > Master <p>At different grades equally responsible for production, maintenance and quality assurance.</p>	<p>Unskilled workers: Production skilled workers</p> <p>Technicians: Maintenance Engineers: Quality assurance</p>	<p>Team of skilled workers, technicians and engineers in charge of production, maintenance and quality assurance.</p>
Occupational structures	<ul style="list-style-type: none"> > Lifelong profession > Full profession > Concrete workpiece machining > Satisfaction and appreciation derived from the perfection of the work 	<ul style="list-style-type: none"> > Mobility > Specialisation > Polarisation of the qualification structures > High proportion of the material flow 	<ul style="list-style-type: none"> > Flexibilisation > Despecialisation > Integration of occupational areas > Decrease of manual operations and intellectualisation
Qualification and competence development (vocational training)	<ul style="list-style-type: none"> > Imitatio-principle > Master craftsmanship 	<ul style="list-style-type: none"> > Job experience in the company > Job theory in public vocational schools > Further training based on ad-hoc supplying and adaptation 	<ul style="list-style-type: none"> > Generalisation of corporate basic training > Company-orientated vocational qualification > Transfer of application-based qualification into further training

(according to Arnold 1997, p. 104)

ative tackling of tasks, which however does not mean that the technical specialisation gets totally lost. In the production itself, however, a demand for competences in many fields is obviously emerging that clearly refers to a surplus qualification that clearly exceeds the actual requirements at work. This is accompanied by a paradigmatic change in the work organisation characterised by a trend towards "systemic rationalisation" (Baethge/ Oberbeck 1986, p. 20) - already diagnosed in the 1980s - and a clearly developed appreciation of competence factors. Martin Baethge and Volker Baethge-Kinsky comment on this as follows: "The management concepts are seeking for productivity increase no longer in the technical automatisisation of the production processes and the restrictive shaping of the work organisation, it is rather a firmly changed perspective on workforce in automatised as well as non-mechanised areas. This concept considers the qualification and technical sovereignty also of the workers as a decisive productivity impetus that should be supported, used and intentionally strengthened. In the end, it aims at an overall integrative reflection on and development of technology and organisation. However asynchronous the change of rationalisation concepts might be, there are at least enough instances in the aforementioned branches showing that the trend towards an overall use of human resources is still existing nowadays - foremost resulting in high qualified professions in the application context of computer-based technologies" (Baethge/ Baethge-Kinsky 1995, p. 145).

These changes in the use of technology in the work process from manual over traditional to modern industry technology also result in fundamental changes in the field of vocational structures and vocational training as the following overview shows: The development of technology application in pro-

duction is thus linked with fundamental effects on the professional structures and the human resource development in the companies as well as the models of qualification and competence development. It is true that this correlation is not to be regarded in a one-sided way since already the mere existence of a qualified skilled worker potential has a quality-shaping effect on the developing job market structures. However, the fact cannot be overlooked that technology with its potentials represents a considerably influential factor for the development of corporate work organisations. When considering the current development, it can be stated that the effects of the new technology will continuously enhance the linking-up of social job markets and the virtualisation of cooperation relationships. This is accompanied by a gradual reduction of specialisation in the field of vocational training. Vocational training will rather adopt a way of vocational i.e. vocational-field basic training that will be enriched by aspects of personality development and the promotion of methodical and communicative competences. Furthermore, the aspect of lifelong learning will gain in importance. It will be indispensable in the future to enable the up-and-coming generation and also the people already employed to direct their own learning processes autonomously.

2. What Holds a System Together?

In the field of organisation management and system learning, it is of major importance to first analyse the different mindsets of those involved in a systemic cooperation. It is important to "verbalise" and document the participants' interpretation approaches, experiences and perspectives on reality. This helps to discover the "fabric from which social systems are made". In this dialogue, the central prerequisite is the openness of cooperation and leadership in complex systems.

The systemic side is becoming more and more the new quality of corporate cooperation. Companies have to increase dramatically their internal in-house differentiation capacities due to escalating environment complexity and dynamics. They are becoming more and more like biological systems, even though the differences between biological and social systems cannot be simply levelled out. It is decisive, however, that the systemic side will take spontaneity, insecurity and imponderables of modern corporate cooperation much more clearly into account: Order emerges ("arises naturally") while the term of organisation is always defined by connotations such as "regularity", "guidelines", "scheduling" etc – a differentiation that is also important when it comes to organising systemic learning.

Systemic thinking is not new. There have been numerous forerunners from different origins that have one common denominator: the farewell to Cartesian thinking. Cartesian thinking is the analysis of causes and effects and attributes a cause to every incidence in the sense of an if-then hypothesis. Its leitmotif is technology i.e. the expectation that one is able to direct complex correlations such as corporate communication as one likes – if only one knows the causing factors. But it is often overlooked that every "solution" is always for its part the cause of complex effect dynamics and that its effects again have systemic consequences and also effects on the directing instance itself, which in the extreme might even be washed away.

An example taken from the international collaboration: With the motivation to counteract the white-collar syndrome rampant in the developing countries, the Germans built a technical college in Thailand in the 1960s. In this college – according to the model of a German skilled worker – students were trained at comparatively high levels and were expected to give innovation and trickle-down impulse to the technological and economical development of the country. When the project – as was said at that time – was "handed over", the following happened: The partners transformed the technical college into a university and – this is an irony of development aid policy – the former project manager was given an honorary doctorate.

Similar examples can be found in all social fields. They have in common that it is no longer the "good" intentions (e.g. claims to leadership) that "justify the means". Incalculability and failure of systemic effects are more and more taken into account. Another goal is to analyse the paradoxical effect correlations between intention and effect in an objective way in order to avoid the excessive appreciation of "vocational training" – a perspective that only the systemic thinking has now pushed to the fore. By this means, it became clear why numerous corporate innovations kept failing in spite of the best intentions of those involved and in spite of energetic actions.

The knowledge of the inability to directly influence the systems is fundamental since systems "operate self-referentially and as a unified whole" – so to speak. This means, that systems first of all respond to their own internal conditions. The system's "output" logically and finally presupposes that there was an "input" beforehand (an input of competences, potentials etc.) Systemic thinking does no longer try to cover up this "annoying circumstance" by more-of-it refinements. It rather takes the logic of self-reference "seriously" and considers itself as a theory of variety, non-linearity and correlation in processes of development, learning, and management. Moreover, the systemic thinking "knows" the inevitability

of "side effects" since those are the actual effects. The traditional leadership and learning theories always treated the unexpected i.e. the "undesired side effects" like something unfortunate. The modern systemic thinking, however, expressly takes these side effects as an articulation of unconventionality and subjectivity. "Side effects" reveal particularities, difficulties, specific sounding boards, and constitute the uniqueness of interaction situations.

Six Basic Principles of the Systemic

Such – for the moment still vague – reflections can be summarised more precisely with the help of the present system theoretical state of discussion. The following "6 basic principles of the systemic" which summarise the relevant contributions, are decisive:

Illustration 2: Six Basic Principles of the Systemic

Basic principles of the systemic

1. „Truth is the invention of a liar!“
(Heinz von Foerster)
2. „We do not live alone together!“
3. „I see what I see!“
4. „Problems are solutions!“ (Mücke)
5. „It is impossible to not communicate!“
(Watzlawick)
6. „The world is not the way we feel it!“

(1) "Truth is the invention of a liar"
(Heinz von Foerster)

This paradox comprises the quintessence of Constructivism. First and foremost, it is necessary to detach oneself from the concept of truth, for it is

still too strongly marked by the idea of an inter-subjectively established and universally acceptable description of reality. Moreover, since the age of Enlightenment, "truth" has been equated with "scientific truth" – the only concept not capable of shattering prejudices and conceptions of the world and additionally – with regard to its relevance to taking action in everyday life – frequently overrated. For this reason, the "subjective truths" are of fundamental importance for orientation, experience of certainty, and the social conduct of human beings. It is not the impact of "objective" findings that makes people change their minds, feelings and actions. The impetus to change is given through newly experienced interpretation and feeling patterns which arise when people have to face crises i.e. fragility.

The learning of individuals and organisations is thus rarely concerned with "truth" but rather with subjective reality.

Truth was subjective before starting the learning process, remains as such while facing new situations and will remain subjective ever after. "Lying" is exclusively reserved to those who know an objective truth, and since it is – according to the constructivist approach – not accessible for us, we are all liars, i.e. we invent our conception of reality by referring to things we can grasp and understand. And by defining our reality this way, it has "real" consequences for us. We realise and overlook, evaluate and trivialise, select and focus through the glasses of "our" construction of reality which will always be subjective and different from other conceptions.

Corporate human resource development is thus also assistance to the construction of subjective realities.

This means that "training" (e.g. in programmes of corporate further training) is no linear incident in the sense of the input-output logic, but rather lives by the multitude of subjective ways of problem solving, associations, application contexts, adoption difficulties etc. These factors must always be taken into account when shaping and coaching the process. "Difference" thus becomes a continuous element of the learning process ("It is different at the beginning, and still is at the end, although everyone has made headway!"), that is another reason why the didactics of corporate human resource development have to detach themselves from the illusion that all learning processes are to be shaped according to the logic of simple mathematics ("There is only one right solution!"), especially when considering the fact that difference plays a more important role in the adoption process than the didactical perspective might be able to realise. In corporate human resource development such reflections are taken up among other things in the diversity-management approach.

(2) "We do not live alone together!"

People construct their "own" reality, however, not only in the context of their specific characters, pre-experiences and biographical backgrounds, they rather do this together by starting from their own respective inner logic and then referring to each other. Thereby the "individual" – the favoured anchor of western educational science – loses to some extent its claim to sole representation. The social becomes visible in its own systemic.

Human beings are both at the same time: individuals and parts of social relationships; they are individuals and e.g. part of a corporate cooperation context. Both parts permeate each other constantly so that corporate human resource development never has "to do" with only one of the two sides.

Corporate human resource development deals with individuals. They have their own subjective and to a certain degree "predictable" – because observable – characters. On looking more carefully, however, they show deficiencies in their own areas of competence and are not at all "masters in their own houses" in certain issues. The dynamics of their origin contexts determine their mindsets, feelings and actions in the here and now. Some anxieties, trepidations or aggressiveness do not originate from themselves. Their conducts might be "adopted" (and therefore perhaps never be understood), be the result of subjective experiences with intensifying or perhaps offending reactions of their relatives or friends, or their conducts express feelings of their parents, grandparents or great-grandparents passed on to them and which were fed already with the mash – so to speak. All these dynamics determine the individual that therefore is no individual: He is the sum of experiences overlapping generations and of own context specifically biographic mouldings. He is thus always more than he actually could be on his own – an aspect that in the main goes against the rediscovery of the self in current discussions (e.g. on self-directed learning).

Also in his present life the individual does not stand alone, he is rather – even when alone – continuously in conjunction with others. Those others tie him with expectations, responsibilities and commitments to themselves, and he hardly finds himself capable of doing what he actually wants. This "he" results rather from the sum of the others who are linked to his actions. Thus, the notion of individuality, that also and especially is the target concept for education efforts, is imperfect, often illusory and therefore void. As the human being constantly "lives alone together" – internally and externally (Molter/ Billerbeck 2000), it is of major importance to rethink the notion of individuality.

(3) "I see what I see!"

This basic principle also deals with a constructivist-based insight into the self-reference of human

perception, mindsets, feelings and actions. This principle rests on a structural conservatism which leads us to subdivide our world into directly available and familiar patterns. For this reason, an analysis of the favoured typical interpretation patterns of human beings gives us access to their world.

When we know about the basic rules governing our everyday consciousness, we realise as well the way how human beings mould their own world. Orientating oneself in everyday life by using subjective interpretation patterns creates routines and habits.

Something new will first and foremost be interpreted by well-known explanations. Those who associate certain situations with threat will interpret other similar situations in a generally defensive way and will mostly articulate more or other doubts than a person who is free of such explanation patterns. Those who learned at an early age that they are able to achieve self-set goals will handle situations in everyday life more optimistically and courageously than someone who had to learn at an early age (because he was told again and again) that his reality works according to other conditions than his own.

Corporate human resource development always implies a development and differentiation of "well-established" and well-known interpretation patterns – a thought that also and especially in the context of coping with crises or innovative action is of major importance.

For if I do not succeed in abandoning my well-established patterns of interpreting the world, I will remain closely attached to my perception of reality for ever and will not be able to think in new and

different ways. In the fast-changing living and working situations of post-modern societies such inflexibility becomes more and more unsuitable. It is rather decisive to "let go" well-loved insights and interpretation routines and to practice new interpretation forms in order to constantly modify one's own subjective reality.

(4) "Problems are solutions!"

This central systemic guideline examines the fact that assessment and characterisations are not possible in system theories. Those who define certain conducts, particularities or interaction structures as "problematic" have to ask themselves which perspective they have chosen and whether this perspective really gives them a privileged access to "reality". Of course, this question is only rhetorical – for a constructivist-orientated observer would never claim that he himself sees something differently when observing others than what he actually sees i.e. or is able to see. He can only know himself about this limitation on his subjective perception and try to prepare himself to ask how the person he faces handles his self-reference, according to Luhmann. What seems a problem to him or others or even the suffering subject as such is not only a "deficiency" but rather a – even if considered as problematic by the people involved – solution. In this sense, Fritz B. Simon asks for the "mechanisms and tricks with which we avoid learning from damage" (Simon 1999, p. 145) and he states:

"If one succeeds in experiencing his environment as unchanged, the given conduct and differentiation repertory suffices to respond to all eventualities. Whatever will happen: Everything is repetitive. And to each challenge by incidents happening in the environment the answer is to hand: It has always been that way; we have always handled it that way. In the interaction between system and environment nothing new happens, nothing is disturbing, there is no need for learning" (ibid, p. 157).

For this reason, systems tend to maintain their structures and solution patterns and if possible, they are not to be changed.

The professional question that might lead out of the problem trance ("One sees problems because one sees them") is: Which system function has been "solved" so far through the problem itself? Once this question has been answered – first and foremost hypothetically and then while interacting with the actors in an increasingly circumscribed way – it is then that functional equivalents can be approached, offered or even practiced. The total process depends on the people's will to cooperate and make progress. The expectations are quite high. They are supposed to let go well-established patterns and to get involved in a new perspective on things i.e. learn to see old things in a new light. This is a learning process and there are thousands of reasons to oppose this step towards a new perspective.

**(5) "It is impossible not to communicate!"
(Watzlawick)**

This is the most famous statement of the systemic communication theory that was already sketched by Watzlawick, Beavin, and Jackson in 1967. With this wording the complexity of communication was pushed to the fore which always comprises more than simply speech. Watzlawick et al. explain it as follows:

"Behaviour has above all one characteristic that is so fundamental that it is often overlooked: Behaviour has no opposite, or to put it more simply: It is impossible not to behave. If you accept that each behaviour in an interpersonal situation is informative i.e. communication it follows that no matter how one may try – it is not possible not to communicate. Action or non-action, words or silence – all have an informative character: They influence others, and these others themselves are not able to not respond to this communication and do therefore communicate themselves" (Watzlawick et al 1974, p. 51).

This means that even silence can be communicative, and the manner, intonation, emphasis as well as gestures and facial expressions communicate more than what can be gathered from the unemotional wording itself, as the numerous – partly amusing misunderstandings that were collected by Schulz von Thun – show. The systemic communication theory has pushed the multi-channel character of communication to the fore, thereby essentially contributing to the traditional differentiation of sender-recipient. However, for a long time the systemic communication theory was keeping to the idea of individually initiated, reciprocal and controllable situations. It is true that by means of this reciprocal interweaving in communication society comes into existence – and this also means: corporate cooperation – however, the socially institutionalised communication forms for their part shape communication in a way that the actors involved cannot grasp its meaning and rarely have influence on what happens.

This fact is of fundamental importance for basic and further training processes. They do not simply follow the logic of knowledge and skills exchange, they are rather marked by the logic of form in which the classroom communication takes place. In this sense, for Simon "the form of teaching is (always) the actual syllabus" (Simon 1999, p. 153), for the technical and specialist knowledge which determines the official expectations of education, prove extremely fleeting and prone to forgetfulness:

"Most adults forget the data knowledge they should have acquired according to the teaching curriculum of their former school. Instead, they remember a more or less benevolent teacher trying to teach them the basic rules of higher mathematics, while they learned in the course of this that they are idiots, worth nothing or socially marginalised, that they have to subjugate or to bow and scrape. (...) In an implicit way messages on interpersonal relationships, conceptions of the human being, and moral and ethic values are passed on with smuggling techniques" (ibid, p. 153 and 154)

The institutionally stored routines and communication patterns of the education institute's secret teaching curriculum find their way into the competence development of the learners, who then have the impression of learning "something" (a thing, an object). This "secret teaching curriculum" clearly shows that the communication theory also has to take these restrictions on communication processes into account, something that has already been increasingly done in the course of systemic development. The statement "It is impossible not to communicate!" has to be supplemented and broadened by the statement "And it is impossible not to communicate within the context of institutionalised expectations and routines!" By this, the systemic perspective on the course of communications and routines will broaden and will realise the apparently pathological aspects within the boundaries of the system in which the individual communicates – a shift in emphasis that has not entirely found its way into the didactical theories yet.

(6) "The world is not the way we feel it!"

What "moves" (or not moves i.e. "stops") the human being is motive and emotion, as already the common Latin origin of both words ("movere") shows. And these moving forces are implicitly – in an off-hand manner – initiated and developed – not equally in every single case but noticeably in a way that stimulating and encouraging experiences clearly further already at an early age the adolescent's capability and willingness to learn. Those who – thanks to the example of role models and reactions of those to whom they relate most closely – had the chance to experience that education is "worth it",

for those it will be more natural to develop a positive attitude to education as well. Of major importance is also the early initiated experience of self-effectiveness: Those who had the chance already at an early age to learn to solve problems on their own and who realised that their tentative steps eventually – also via unsuccessful attempts that were not being accompanied by critique or even debasement ("You'll never make it!") but by patient encouragement – led to success, those more likely developed a feeling of self-effectiveness. And the experience of self-effectiveness seems to be – taking all results of the present emotion research into account (cf. Arnold 2005) – a kind of early "racket feeling"¹ that influences the cognitive and emotional development later on.

What meaning do those insights on the "predominant" meaning of emotional racket feelings have – for a theory of corporate human resource development? First and foremost, they strengthen the constructivist thesis that it is impossible to argue about realities, since the same context experiences of different people involved are experienced or "filed" in different emotionally "tinted" ways – a mechanism that can lead to fundamental misunderstandings in intercultural but also and especially school contexts. Feelings are inner programming, i.e. at early stages of the socialisation process they are learned and afterwards condition the perspectives on the world. They form the colour palette with which we paint our images of reality, that is, what seems obvious to our eyes. We cannot avoid taking our own colour palette since we can only use colours we have. For this reason the reality can hurt us, but whether we only use dark or rather one or two light or even garish colours to visualise our mood is exclusively

¹ The notion of „racket feeling“ is taken from the Transactional Analysis and is the – frequently unconscious – racket – an emotion learned and practiced during childhood and which unconsciously leads an adult person to create a circumstance where they can legitimately feel the racket feelings, thus abiding by and reinforcing their childhood scripts.

dependent on our inner possibilities. Those find their "echo" (Heisig/ Savoy-Deermann 2001) in the social relationships we maintain. Thus each emotional image of reality is also something absolutely typical and self-produced. And there seems to be another aspect: The colours "have to" be used. One therefore almost "seeks for" appropriate motives that can be depicted with the colour shades we have on our colour palette. This effect of our emotionality radicalises once more the basic thesis of pedagogic Constructivism that states that we ourselves are the creators of the social realities we encounter or that make us even suffer.

Emotional competence presupposes a self-reflexive knowledge about our own colour palette: We have to face unemotionally and courageously our own favoured ways of "to-feel-oneself-in-the-world" in order to be able to realise the way we present and impose ourselves to the world.

Thereby a skill is initiated that is especially important for executives and professionals of corporate human resource development. It is true that they are "also only human beings", however, they must not "impose" themselves, but rather have to observe and coach the others in their ways to "handle their self-reference" (Luhmann 2004, p. 63) in which they are often even imprisoned. This is the actual core of every corporate human resource development that intends to promote the innovation capacities of the staff and the managers.

A basic insight into the systemic of cognition and emotion is that resistance, overreaction or pugnacity always and often first of all has completely subjective reasons for forming conceptions of the world that possibly correspond to what one has always felt to be plausible and certain. For "certainty" is a racket feeling. It is true that this procedure is not scientific but quite widespread. Those who discard vehemently and categorically different perspectives i.e. discussions of existing versions (for example, the perspective that the surrounding world of soft facts is a product of our sense organs") and those who even start to counterattack will "profit" from this quarrel because it helps to keep to the well-known and familiar. Fritz B. Simon in this context speaks of the "art not to learn" (Simon 1999), i.e. to avoid learning. We are world champions of keeping a firm hold on things that are familiar to us – a reason why we subconsciously oppose to really solve our problems.

Systems are Interpretation Habits

To realise the factual reality of interpretations, to acknowledge interpretation tendencies even as the – actual – "structures of organisations" – this is an essential prerequisite to grasp the possibilities of interventions in auto-poietic company business life i.e. in the preconditions of a professional presentation of corporate self-organisation. A requirement is in a certain way that self-guided operations first and foremost have to make sure of the respectively prevailing interpretation structures before imposing with authority one – often apparently the only right – interpretation.

Thanks to the contributions of modern system theory and in particular the work of Paul Watzlawick, the company education theorists have gradually learned that it is not only the consideration of realities of second degree, that is, interpretation that helps to manage successfully complex systems, but also, necessarily, their openness, since the closeness of systems also bears the destructive tendency to quickly fall back upon "well-known" system routines and to apply the counterproductive solving pattern "More of this" (Watzlawick) when it comes to problems and conflicts. This generally leads to a further escalation and aggravation of the problems. This "strange closeness of social systems" (Wollnik 1994, p. 119) can only be overcome in the end if the system receives change impulses by opening itself towards the inside as well as to the outside and starts to see itself as a part of a higher whole.

In his publications, Frederic Vester has kept pointing to the fact that "only open systems are capable of learning" (Vester 1988, p. 29) – a reason why we should stop making the error of assessing systems as closed entities controllable from the outside. In his book "Leitmotif of systemic thinking" he also clearly sketches the dangers and bounds of a management theory of "direct intervention" and pleads for a systemic-evolutionary management that no longer

"(...) ignores to the largest possible extent the rules that determine the way of behaviour through self-direction. The prevailing idea is that all goals are attainable if only one tries very hard – possibly supported by modern technology and EDP – to regulate everything in great detail. As this is, however, never possible, all efforts end up in stricter controls.

In practice, a > failure of regulation entails even more regulations; a galloping increase of costs entails even more budgeting and cost control; planning mistakes entail even more planning etc (Malik)" (Vester 1992, p. 156)

This is why the usual "fallacies" or to put it otherwise: the familiar sub-complex thinking patterns of management when handling complex issues have to be overcome by implementing a systemic-evolutionary management that takes the fact of tied-down interpretation patterns for the definition of situations into account as well as the principle of a – necessary – openness of systems.

What does "openness" as an organisation and company principle mean? And: What ethical-professional implications accompany this basic principle?

According to the modern system theories, the "organisation of open systems" requires the open and trustful cooperation of the actors. Managers have to provide a scope; they have to facilitate self-organisation and should only manage in those areas that run out of their own system forces.

It might be true that only economically successful companies can introduce pedagogical or subject-orientated innovations; however, there are also other examples to be found that show that also trust will pay off:

Illustration 3: Fallacies in the Handling of Complex Problems and Opposite Standpoints

Fallacy	Opposite standpoint
1. Problems exist and only have to be defined precisely.	Problems are dependent on perspectives and bound to interpretation.
2. Every problem is the direct effect of a cause.	The problem factors are correlated and looped in networks.
3. To understand a situation one just needs to "make a photo" of the present state.	It is only possible to understand a situation if one examines the dynamics, i.e. the behaviour of the problem factors over the course of time.
4. Behaviour is predictable, it is important, thought, to have a sufficient information basis.	Behaviour is not sufficiently predictable but rather uncertain in principle.
5. Problematic situations are "controllable", it is merely a question of efforts.	There are limits to the controllability which have to be examined and which serve as obligatory guidelines.
6. In practice, a "doer" is capable of solving all problems.	The conditions that are to be changed show proper activities and resist any regulation
7. By introducing a solution the problem can be considered as definitely solved.	Problems still exist even after having solved them and are often only modified by "solving" them.

(Wollnik 1994, p. 138)

Example of Mistrust Management: The Challenger Tragedy

"On 28 January 1986 the 25th space mission of a manned orbiter, type >Space Shuttle< ended with a gigantic explosion shortly after the take-off and cost the lives of seven astronauts. (...)

It appeared at first that the cause of the tragedy was to find in a technical defect of the rocket system. With the unusual cold during the take-off preparations the rubber seal between the single components of the main rocket got brittle. These seals could not stand the enormous pressure during the take-off phase. A leak developed from which the propellant issued which again got into the jet of fire which again led to the explosion exactly after 73,628 seconds.

The reasons for this disaster have to be sought, however, in a far-fetched case of management failure - according to the findings of the presidential investigation commission. The construction deficiencies of the booster connection for example had been well-known since 1980; 11 days before the catastrophe there were still discussions going on between NASA and Morton Thiokol Company about possible improvements. Anyhow, a booster failure was considered as the highest risk amongst the 14 theoretically most important accident causes in shuttle launchings.

Nevertheless, the tragedy could have been easily avoided if in the course of the take-off preparations the warnings of two engineers of booster producer Morton Thiokol would have been taken seriously" (according to: Löhner 1991, p. 9f; quoted according to: Steinmann/ Schreyögg 1993, p. 113f).

Unfortunately, the engineers were not able to assert themselves in the decision process running through four hierarchical levels, even though they had been pointing at - and this in no uncertain terms - the incalculable risk of a start with an outside tempera-

ture of under 12 degrees Celsius. The managers' insistence on a take-off release as quickly as possible was, however, due to economical reasons. With the words "Take off your engineering hat and put on your management hat" the superiors asserted themselves.

"(...) in the course of the hierarchical take-off release process the critique of the engineers was not mentioned any more. The highly sensitive information was (...) filtered away. That is why during the immediate take-off preparations the problem of low outside temperature was not duly taken into account. A measurement team established a temperature of -13°C two and a half hours before the take-off and did not attach any particular importance to this since even the general minimum criterion of 0°C as abortion mark had been revoked already. When the rockets were fired at exactly 11:38 the outside temperature was 3°C, i.e. exactly 9°C under the recommended 12°C mark. Exactly 73,628 seconds later, the data transmission ended abruptly; on the radio frequency suddenly there was only a rustle to be heard; on the screens quickly spread a milky white cloud. The rocket exploded" (ibid., p. 114).

At first, these case studies clearly show the aforementioned close relationship between the organisational dimension and the qualification dimension of corporate action, between the openness of companies on the one hand and trust in cooperation on the other. Both obviously seem to be underdeveloped in the "interpretation structures" (Wollnik) of the NASA: A four-level hierarchy evades the concerns of the technological base and their implications are realised and duly taken into account. There is obviously a lack of trust in the staff's competences and responsibilities. Instead of communication commands and self-discipline are prevailing; the corporate self-organisation is thereby suffocated - which in the end causes the death of seven astronauts.

When considering the qualification dimension of this company ethical conflict, the guideline for corporate human resource management is to initiate, coach and help shape the necessary shift of the enterprise culture towards openness and trust: in my opinion, the necessary prerequisite is the modification of well-worn "interpretation structures" of the management as well as a further training programme strongly orientated towards extra-professional learning for the staff.

Self-directed actions have to be enhanced i.e. authorised by the management and by the corporate trainers. Both have to rethink and redefine their "areas of responsibility" and have to develop another professional attitude. They should no longer consider themselves as the sole masters of the situation whose instructions and controls are finally crucial to the success of production, cooperation and learning. More important is rather a conscious withdrawal from their own control responsibilities as well as the capability to realise and shape complex effect correlations.

3. How Does an Organisation Develop?

The question how corporate organisations develop has been differently assessed in the last decades. While in earlier times there was a stronger "belief" in the force of institutionalisation, regulations and increase of bureaucracy, this attitude has fundamentally changed today. Human factors as well as the organisation i.e. corporate culture have been increasingly pushed to the fore. It has gradually become clear that organisations can be purposefully shaped through a strategic development. Thus, the importance of corporate human resource development has become more and more important for the organisation development.

By means of the paradigm of corporate culture, the corporate human resource development is prompted to think in "new" ways. In this sense, three aspects of corporate culture development seem to comprise essential linking aspects for a new comprehension of corporate human resource development and its promotion. These three aspects are:

- > Every company (already) has a culture (existing culture).
- > "Culture" comprises the invisible aspects of the company, the aspect of the iceberg under the surface of the water, i.e. corporate culture is – mostly – latent (latency of corporate culture).
- > "Corporate culture" stands for a normative concept of management and cooperation that starts from the idea that only those companies will survive on the market that are committed to humanistic and staff orientated targets (required culture).

Observing the shaping and development of companies under the viewpoint of culture clearly shows that it is not only the expert level i.e. the level of expert logic at which instructions, time, hierarchies as well as tasks and means are important for the success of the company; it is rather the psycho-social level at which acceptance and competence as well as affection and unwritten laws play an important role and where sympathy and trust relationships come into existence. An essential "secret" of

culture-sensitive company management is the way the management but also the whole staff "succeeds in" effectively developing the "bottom of the iceberg" and in integrating essential elements of the psycho-logic of this psycho-social level into the "official" company management.

Modern corporate human resource management is "sensitive to culture". It knows the "soft" factors of organisation development and enhances not only the competences of the actors but also helps to develop the culture of cooperation ("corporate culture").

Developmental Steps of Corporate Human Resource Management

Against the background of this strategic necessity, the corporate human resource development – mainly in the field of large company contexts – has been significantly increasing during the last decades. The early stage of corporate adult learning was marked to the greatest possible extent by (improper) seminars and a more or less clear misuse of further education chances as a "prestige treat" or as a gratification for managers. In the 1980s and 1990s, modern human resource development approaches were developed aimed at adjusting the qualification of the staff to the systemic context of the company development (cf. amongst others Sattelberger 1991).

To the fore of such orientation is the question of the collective addressees and the definition of further training demands by the people involved directly on site.

At the same time, the corporate human resource development is moving into the context of corpo-

rate developments; the shaping of corporate culture proves to be increasingly the central further training task that first of all has to be found out by the managers themselves; they become the trainers of their staff. Strategies of a staff-orientated and systemic human resource support replace the usual "human resource management".

When considering the literary definitions of the last twenty years, three aspects show up – in my opinion:

- > First: "Human resource development is defined as a "systematic" i.e. "targeted" corporate activity. While in earlier definitions the goals of an immediate position and career orientation seemed to prevail, the definitions of these days are marked by a dominance of the indirect goals – in particular in the context of "strategy-implementing human resource development". At the same time, the awareness of structural tension between corporate targets and staff targets gets lost.
- > Second: "Human resource development" is orientated to a large degree towards behaviour. This behaviour orientation is pursued with different perspectives:
 - > Qualifications are to be improved (general perspective on promotion)
 - > The staff should be helped to cope with changed requirements (reflexive self-aid perspective)
 - > Another objective is to convey qualifications that are relevant for the present moment and the future (traditional training perspective)
 - > Behaviour potentials are to be established, supported and used (prospective potential orientation)
 - > The conditions for self-organised, strategy implementing and organisational learning are to be created (structure orientation)
- > Third: "Human resource development" is closely associated with organisation development i.e. – and this is new – with organisational learning of the company. In addition to the traditional career, position, and qualification orientated measures organisation and structure orientated activities come more and more to the fore.

These tendencies are also confirmed by a systemic perspective on the development history of human resource attitude in Germany. Wunderer and Kuhn have reconstructed this attitude in a graphic way:

Of major importance is the aforementioned trust in the employees. The following example will show how the still widespread – and official – culture of institutionalised mistrust (control, supervision, assessment etc.) can and must be replaced by "trust" as an element of the psycho-social level.

Example: The Policy of "Open Material Stores" by Hewlett Packard in Santa Rosa:

"The policy of open material stores just means that the engineers do not only have free access to the stock but are also asked to use it for their own needs! The main idea is that engineers, even if they do not use the material for their current project, will in any case learn something and that all will be of benefit to the innovation spirit of the company. According to an anecdote, Bill (Hewlett) when coming to the plant noticed that the material stores were closed. He directly went into the repair department, took some bolt cutters and removed the padlock from the door. He left a note that was found on Monday morning: > Never lock this door again! Thank you. Bill<" (Peters/ Watermann 1986, 283f).

Illustration 4: Developmental Steps of the Corporate Human Resource Development in Germany

Ideal phases of human resource development

I. Bureaucratisation

- > Philosophy:
- > Strategy:
Administration of staff files,
- > Main functions:
partly in side functions
- > In charge:

Until approx. 1960:

Commercial stock fostering of >human resource accounts<
Establishment of mainly administrative human resource functions

Implementation of decisions concerning human resource policy,

Commercial Management

II. Institutionalisation

- > Philosophy:
- > Strategy:
- > Main functions:
- > In charge:

From 1960 onwards:

Adaptation of the staff to organisational requirements (socialisation concepts)
Professionalising of the human resource managers,
Centralisation of the staff, Specialisation of the staff function
Beside the core functions: administration, employment, recruitment, remuneration, legal conflict settlement, additional furthering of qualitative social policy (education, free time, workplaces)
Human resource managers in large and medium-sized companies

III. Humanisation

- > Philosophy:
- > Strategy:
- > Main functions:
- > In charge:

From 1970 onwards:

Adaptation of the organisation to the staff (accommodation concepts)
Specialisation, consolidation as well as staff orientation of the personnel functions
Humanisation, participation, consolidation of qualitative functions such as basic and further training (off-the-job), cooperative staff management, human relations, staff coaching, humanisation of workplaces, work environment, working hours and organisation and human resource development
Human resource department in the management, human resource department in the management, staff, employees' representation

IV. Economisation

> Philosophy:

> Strategy:

> Main functions:

> In charge:

from 1980 onwards:

Adaptation of organisation and staff to the changed frame conditions according to economical aspects

Decentralisation, generalisation, reduction of bureaucracy, rationalisation of personnel functions

Accommodation of work and workforces, rationalisation of development potentials, establishment of quantitative and voluntary staff performances, orientation towards a policy of release

Management, human resource, line management

V. Corporate orientation

> Philosophy:

> Strategy:

> Main functions:

> In charge:

From 1990 onwards:

Staff regarded as the most important, most precious and most sensitive company resource. The human resource management is supposed to win, support and maintain them as sub-contractors, Net product (added value) as main target

Centralisation of strategic and conceptual human resource management

Participation in knowledge, thinking, action and responsibility in all essential company decisions, as well as integrated and equal participation in the philosophy, policy and strategy of the company with particular regard to >human being and work<.

Evaluation of the economical and social consequences of corporate decisions (human resource controlling).

The management, in particular a member responsible for the staff (human resources and human capital), the central human resource management as a >net product centre< and the line (as a decentralised human resource management)

(Wunderer/Kuhn 1995, p. 16)

Culture-sensitive Human Resource Development

As already announced, I will now continue to track down this changed – culture-sensitive – comprehension of corporate development with regard to the company learning and will above all investigate what kind of “new thinking” and also new practice is opening up for the company training theory by means of this paradigm of corporate culture. Or to put it more precisely: What different perspectives, concepts and interventions have to be taken up and “implemented” by a corporate human resource management when trying to heed the characteristic of corporate culture development?

The basis for an evolutionary and culture-sensitive education management is the “farewell to the didactic illusion of feasibility”. This farewell is not only a new concept of didactics (facilitation didactics) but simultaneously also leads to a new organisation concept: “At the same time the illusion of feasibility is abandoned – since corporate culture development cannot be managed” – this is what we read in Hans-Gerd Sevatius’ new book “From strategic management to evolutionary leadership” (Sevatius 1991, p. 6). Logically, neither an education manager is able to “manage” the corporate culture development, however, he can create the conditions for the development of an evolutionary learning culture in the company that in the end will also inspire the company to appreciate and systematically develop progressive and learning-orientated attitudes.

Of fundamental importance for the promotion of such a learning culture in the company is the “evolutionary perspective” from which both the managers and those in charge of education can observe the development of the company. The evolutionary perspective will help to “conceptualise” corporate learning and corporate culture development in a more realistic way, namely as an open, more or less self-organising process. Corporate human resource

developers can – in the face of development dynamics and networks of complex corporate structures – no longer only attend to selected aspects of the system, such as the further training or single learning processes or even single aspects of learning processes (e.g. learning goal, method or media). They can no longer think in mono-causal linear chains and search one – reparable – cause for every occurrence, for every issue (e.g. individual qualification deficiency). It is rather decisive that they develop a capability of cross-functional thinking and that they are able to realise linking patterns.

The corporate human resource development has already embarked on new approaches that hardly resemble the former approaches to human resource development or to corporate basic and further training: “At Rank Xerox the senior executives of customer organisations discuss their subjectively interpreted strong points and deficiencies of Xerox with the Xerox’s senior executives in the framework of a one week senior-management-programme. Weyer-shaeuer regularly invites costumers to four day seminars in order to jointly examine the market orientation of their own company and to identify common chances. At United Technologies a workshop of several days together with costumers is integrated into a long-term process of >creating customer focus<” (Sattelberger 1991, p. 20).

It is the organisations – as the aforementioned examples have shown – that strive to broaden their collective knowledge and not “only” the individual employees. The management of corporate learning processes therefore requires from those in charge not only an “evolutionary viewpoint” but also a skill at acting and structuring in a “system-orientated” way. This kind of managing corporate development and learning processes requires other competences than “doing” and “having the upper hand”; it is rather a matter of socio-communicative and didactic skills in the dialogue-orientated education demand analysis, in promoting groups and in coaching and giving advice for change. It is also a matter

of thorough "sensitivity" for the social momentum of organisational and organisation change. The training in the company as well as the corporate human resource development in the learning enterprise thus is increasingly tasked with the facilitation of self-organisation.

A more precise definition of the tasks and functions is taken over by system-orientated human resource developers who understand their responsibility in a new and thorough sense as the "facilitation of corporate self-organisation" i.e. as the development of corporate learning capabilities through a targeted promotion of the corporate company culture – this more precise definition can be derived – subsequent to the "characteristics and conducts of system-orientated executives" gathered by G.J.B. Probst (Probst 1991, p.333) – also for the education domain. In this sense, also the system-orientated education managers would have to think "in an integrative way and in cycles" (ibid.) by not only attending to the qualification deficiencies of the individual employees but also more and more intensely to the organisationally caused "education causes" and "education effects". Neither do they "think" any longer (only) in seminar and programme offers but in categories of an overall coaching of processes. Likewise, education managers "have a well-developed sense for analysis and synthesis" (ibid.) and see their main task in organising forums for problem analysis and synthesis in the system divisions of the company. All in all, system-orientated education managers also adhere to "an evolutionary understanding of the initiation of order in social systems" (ibid.) and therefore openly approach change programmes and learning requirements of their company.

This means that they do no longer organise training provisions "at all costs" but rather consider themselves as "responsible" for the facilitation of corporate self-organisation in a thorough sense. This is the reason why they offer workshops and process coaching and by this try to shape the culture of discussion, cooperation, and decision in the departments and teams in a more "dialogue-orientated" way. By this, they contribute not only to the development of the corporate culture but also to the promotion of the company's capability to learn and develop. The promotion of self-organisation and learning capabilities of the company is reached – to summarise this "new responsibility" of system-orientated education managers – especially through the fact that the education managers in a certain way "relocate" the company education into the cooperation practice of the departments and project teams. "Subject" of a system-orientated corporate human resource development is then no longer the "administration" of a programme or the management of seminars but rather the expansion and use of the learning effectiveness of everyday cooperation in the company. In this sense, the human resource developers promote the corporate culture especially by supporting the learning culture, i.e. the learning and development capability of "their" systems.

The contribution of managers to the development of corporate culture is to be seen in the fact that they systematically offer a presentation of the corporate self-organisation in order to boost the confidence in the own forces and to help to reinforce the learning and education effectiveness of everyday corporate cooperation.

Personality-orientated Change of the Corporate Learning Culture

The corporate human resource development presents itself in its avant-garde variants increasingly also as the endeavour for personality development. It is true that this trend is no longer just focused on the individual and his qualification requirements but also focused on integrating the individual more strongly into the processes of company developments – this is still not predominant in all branches and companies. Of fundamental importance is the attempt at a thorough inspection of the corporate change processes as well as regards to the qualification measures caused and facilitated by these. Those holistic concepts have been prepared over many years through the influences of the humanistic psychology the reception of which in the corporate environment has always been much more intensive than in the general adult education discussion, as well as through concepts of a systematic corporate i.e. organisation development. This holistic-systemic concept is accompanied by new leadership theories that lay emphasis on the importance of conveying meaning, integration and participation. Staff management is increasingly pedagogically substantiated:

The executive becomes the trainer of his staff, the presenter of corporate self-organisation and the "designer" i.e. constructor of future visions. Corporate human resource development presents itself as a form of organisation development regarding itself as a "culture development", that is, as a development of common symbolisation forms and of corporate culture.

Further training i.e. lifelong learning of adult employees can also be considered as a form of "deculturalisation in corporate cultures" which,

however, can be implemented increasingly less intentionally and increasingly more functionally by "providing" interpretation repertoires and by granting the chance to take part in the interpretation process. With this integration of corporate further training into the cooperative work on a company's vision, interpretation, and culture, a new, constructivist dimension of extra-professional learning within the corporate further training comes to the fore.

It is not the requirements and issues of a company that serve as the sole derivation basis for qualification measures, but rather the constructions and interpretation patterns that already exist in a company that facilitate in different ways a dynamic change process or even prevent it – in the sense of mental barriers. Beside the so-called qualifications to co-shape, it also becomes increasingly important to enable the staff to take part in "shaping" corporate actions "in a meaningful way". In this context the effects resulting from the social change in values and the necessity of a product-ethical legitimating of the proper work do also influence the orientation of corporate further training measures.

Such a culture-related corporate human resource development finally starts from the aforementioned assumption that corporate actions have to do with constructed realities – realities that achieve content and value rather through plausibility and consensus than through a correspondence with a supposedly objective reality. "Truth is what works" proves the necessary point of reference in this context or, to put it more precisely, the "exam category" for a successful transformation of subjective realities. Corporate further training increasingly realises that also the corporate adult learning must be determined in this holistic-constructivist way, thereby opening a new dimension to the adult education theory – namely the linking-up of reflexive learning of the individual with the systemic learning of the organisation.

The personality-orientated change of corporate learning cultures is accompanied by the necessary

modification of the central didactic concepts. Theory is replaced by learning support, and "production" of qualification by possibilities of learning, interpretation i.e. reinterpretation. The companies have to overcome the closed concepts of a traditional qualification policy and have to substitute them by concepts of facilitation didactics, that is, by open concepts of self-organised learning. These concepts must comprise not only the acquisition of specialist knowledge and the promotion and development of key qualifications i.e. social competences and methodical competences, but also a scope for experiencing and learning self-organised actions and concrete participation in constructing corporate realities. In this sense, the corporate further training has not only used project approaches from the reform education theory of the last decades. Rather has it developed and distinguished itself ever more clearly through an independent didactic approach to self-organised learning that is marked by the fact that the extra-professional dimensions of cooperation have a higher rank in the learning goal definitions and are – with regard to their paradoxical meaning as the actual core of specialist qualification – respectively taken into account.

As far as the justification of a personality- and culture-orientated corporate further education is concerned, it can be observed that the success of corporate further training is increasingly assessed by examining whether the company manages to cut back the rigidity in the orientations of the employees and to optimise their skills at solving conflicts, at being creative and at cooperating. The unstructured learning processes gain more importance in this context in that the participants systematically face the challenge to learn how to cope with uncertainty and acquire a skill in tackling unexpected requirements. Such a personality-orientated corporate further training represents itself as a relevant parallel concept for human resource development in the framework of lean production. A work organisation that is marked by the optimal use of flexibility and self-organisation potentials especially requires

a broad personality development of the employees. Such a personality development realises much of what is currently discussed as the ideal of a new general education: the single individual must no longer have material knowledge in such a great extent but must rather have methodical competences in a thorough sense, that is, he must be able to gain knowledge, view over unexpected situations and access to new problem solving mechanisms on his own.

Such a personality development surely cannot be guaranteed through corporate further training alone. It is rather important that the learning culture in all of our education institutes is critically analysed and then changed. Otherwise it cannot be avoided that e.g. adolescents are demotivated through the official and secret curriculum of our schools in a way that the corporate basic and further training will not be able to compensate these learning damages. A change of school contents and learning forms therefore is a basic prerequisite for the professional and extra-professional learning in the corporate further training. In this sense, also the subject structure of our schools has to be critically analysed with regard to the scheduling of existing subjects and the "completeness" of the school curriculum. Important content-related amendments would be – not only with view to the working world but also to the extra-professional learning goal of "coping with uncertainty" – new "subjects" such as "culture studies ('culturality' and 'interculturality')" as well as "conduct in conflicts and communication". In order to prepare and initiate this extra-professional learning within the framework of a curriculum, the subject "knowledge of methods" should also be integrated. The students will systematically train their work method knowledge and among other things will also train and develop the following methodical skills: "highlighting and underlining texts", "summarising texts", "working with reference books", "dealing with libraries", "presenting results and visualisation", "learning techniques" etc.

4. How Can a System be Directed?

In recent discussions on the question of how to direct a system, the attention has been increasingly drawn to schools and school development. Schools too are systems, and also in these places, activities have to be initiated and coordinated in a well-directed way. In addition to this, schools are the institutes in which the future employees of a company are trained and socialised and in which the adolescents "experience" the meaning of organisational action and cooperation. In the following, the example of school organisation will be examined for existing system management.

Schools are complex systems in which structures as well as all sorts of motives, emotions and competences of every participant combine in manifold ways. Moreover, as we have seen before, systems are contexts of cooperation and communication that cannot be directed purposely and unerringly. They develop their existing structures, processes, and routines out of the existing structures, processes, and routines – according to the paradoxical description of system theory. School development therefore has to start from this given self-organisation of system development and can only succeed "from within".

Developments Start from Within!

In his book "Improving Schools from within", Roland S. Barth describes school as a "community of learners" (Barth 1990, p. XVI) in which the participants cooperate in order to enhance further development and learning reforms. Collegiality is the most important and constructive form of interaction – a reason why "becoming colleagues" (ibid., p. 29) represents the substantial prerequisite for a really systemic school development. When the ways of cooperation practiced at school are regarded, the observations are sobering – as Barth puts it quite picturesquely: In most schools, the great force of cooperativeness helping to achieve a common goal is completely ignored:

„It is recognised neither as part of the problem nor as part of the solution" (ibid. p.30).

Nonetheless, the perspective on collegiality exactly highlights the fabric that organisations and their cultures made of: social action. This is a kind of action that is "motivated in a meaningful way" (Max Weber) and generally "related": Even if one works all the way on his own, he realises that social action is a very special pattern of relatedness. Barth's main thought is directed towards the wish to clearly show that interactive relatedness is indispensable for a dynamic development of systemic contexts. This relatedness is of another substance than of "getting along well together" or even kindness. Barth therefore delimits "collegiality" from the widespread forms of "congeniality" and subsequent to Judith Warren Little states:

„Collegiality is the presence of four specific behaviours, as follows:

- > Adults in schools talk about practice. These conversations about teaching and learning are frequent, continuous, concrete and precise.
- > Adults in school observe each other engaged in the practice of teaching and administration. These observations become the practice to reflect on and talk about.
- > Adults engaged together in work on curriculum by planning, designing, researching, and evaluating curriculum.
- > Finally, adults in schools teach each other what they know about teaching, learning, and leading. Craft knowledge is revealed, articulated, and shared" (ibid. p.31).

These four characteristics of school collegiality have been taken up in the latest school development concepts in which self-organisation plays a major role. Amongst others, Claus G. Buhren and Hans-Günther Rolff especially focus on team development. In their view, a team is in a certain way "the top form of a group" (Buhren/Rolff 2002, p. 122). It is true that teachers are used to belonging to different groups – the assignments of which are mostly relatively abstract (staff, study groups etc.) – and that they have to assume the expected roles. And

yet, some developments are still required to change these groups into real teams.

How to Change Groups into Teams

Buhren and Rolff see the character of teams in the fact that they

- > have a common task,
- > cooperate in a direct way,
- > pursue common goals and
- > develop a community feeling

(Buhren/ Rolff 2002, p. 112).

The more groups adopt the team character, the more developed will be also the characteristics of collegiality. This also corresponds to the claim of "building professional communities in schools" presented by Sharon Kruse, Karen Seashore, and Anthony Bryk (Kruse et al. 1994). They consider the professionalising of teaching as the focal point of school development. Especially since school development is a process in an uncertain and complex area, they think that this individual professionalising has absolutely to be pushed to the fore:

„Researchers and reformers can't afford to overlook the impact of decisions and actions that teachers, working together in some type of sustained professional contact, take to improve school performance. This collective reflection, development of standards and expectations and formulation of plans for action are major hallmarks of a well-developed professional community. In schools where professional community is strong, teachers enjoy much greater support from their colleagues. Research suggests they feel more effective at their jobs" (ibid. S.3).

Similar to the question of creating corporate culture – which per se does already exist, whether it be a dynamic or dead culture – also the question of how to develop the existing groups into teams i.e. how to develop individual competitors into colleagues, implies a difficult problematic. An inner attitude is

required that under the conditions that have been prevailing so far, has been rather impeded than promoted. So far, it has been "more profitable" for the individual teachers to rely preferably on themselves rather than on the cooperativeness of the group. Barth describes this as follows:

„Collegiality requires that everyone be willing to give up something without knowing in advance just what that may be. But the risk and cost of interdependence are nothing next to the risk and costs of sustaining a climate of emotional toxicity and costs of working in isolation, in opposite corners of the sandbox" (Barth 1990, p.32).

However, team i.e. staff development requires – and this is a paradox – something that first of all serves as a goal for itself: The creation of trust in cooperative interdependence that always implies dependence (on the reliability and quality of the colleagues' assistance). Thus, the question is how this paradox can be resolved in school development projects, especially since the quality of the relationships among the adults (teachers) is the "sine qua non" (ibid.) of improvement. There is every reason to believe that principals who appreciate and support collegiality are the central forerunners for the development of cooperative relation patterns. By openly articulating their estimations and expectations and by fostering the continuous dialogue with the teachers, they obviously help to create a culture of trust, dialogue, and cooperation. Something similar applies to their appreciation and support of cooperation plans of the staff.

The encouragement ("empowerment") of teachers to work together is first and foremost expressed in the common planning of subjects and in the cooperative development of common interests. Leonard Horster and Hans-Günter Rolff dedicated a whole chapter on this in their book "lesson development" (Horster/ Rolff 2001). In their view, "cooperation culture development" (ibid., p. 80) is characterised by the teachers willingness to

> jointly develop the subjects; Of importance is – as they put it – “to deal with the working hours of the teachers in a meaningful way” (ibid., p. 81):

“On the one hand, the cooperation in planning the subjects is to be concentrated on some exemplary themes, on the other hand, cooperation phases should be calculated in a way that they lead to results within a conference which may influence the teaching in the long run. Cooperation in this sense means that the common planning of exemplary themes will also help to gradually build up a stock of common ideas” (ibid.).

> cooperatively plan and develop projects; the particular aim is to gradually develop those competences within the staff that “can not be presupposed in a staff that is mainly socialised via the disciplines (above all of the school forms of SII with comparatively elaborated subject structures)” (ibid., p. 83), as the results of an interdisciplinary project planning on the subject “Promoting one’s own school” show:

“The team members then realised that the planning of an interdisciplinary project requires competences which none of the participants possesses on their own and which can neither be replaced by the intervention of the hierarchy level one higher, but which rather result from common work.” (ibid., p. 84).

> Numerous groups do not manage – due to their different disciplinary backgrounds – to agree on a common planning procedure. In order to be successful here, it was necessary

- > to agree on a common objective,
- > to discuss about the ways and means for achieving these objectives,
- > to agree on the specific contributions of the different subjects,
- > to bring everything into the right order of events in order to facilitate a meaningful cooperation of the participating subjects,

> and to take the different curricular stipulations of the partly very different subjects into account” (ibid.);

> to come to an arrangement on the agreed promotion of methodical competences. In order to help students optimise their capacity for self-directed learning, it is important – e.g. on the basis of a vision that guides the staff’s self-perception – to apply coordinated measures in order to practice and train relevant learning methods.

These three forms of promoting the teachers’ cooperation show in an exemplary way what factors are important for the establishment of professional collegiality at schools. Of fundamental importance is a double perspective: On the one hand, a thorough “responsibility” of the central actors for the disciplinary and profile-related development and improvement of their own work is to be supported, on the other hand, professional autonomy should be granted. Teachers are becoming the actual supporters of this development. In addition to this, they are supposed to establish and maintain the standards. Simultaneously, the principles are facing new responsibility domains. They are more and more responsible for guaranteeing the necessary support structures as well as for the model-orientated vision work; they accompany and coach the staff and work in the context of fostering self-organisation and autonomy.

School Development Needs a (Didactic) Vision

School development is dependent on the visions of those who wish to initiate and realise it. “Those who do not know where to go may get somewhere where they never wanted to get” – this is what Mager, the learning objective theorist, already told us, and one feels like adding: “Or they might get somewhere where they have already been (“often only clad in new rhetoric”)!” Vision is, however, more than an objective. Vision is also the conviction and the wish to do the

right things. As a dedicated blueprint, it depends on the reliable implementation by those who take responsibilities, that is, principals, team leaders or teachers. Visions must be "put visibly into practice". This means that objectives such as "self-management capacities" or the claim for "We-are-a-school-in-which-dealing-with-conflicts-is-trained!" cannot be credibly realised in the context of a strongly hierarchical delegation of responsibilities and assignments. Neither can "communication skills" be effectively supported and enhanced by teacher teams where the people involved are not able to communicate.

For this reason, the "school development" claim "defies" any symbolic to-do. School development has to get under the skin, that is, has to be willing to see well-known things in a new light and to take action if it really intends to set something going. "Compulsory exercises" according to the motto "We-define-our-school-programme!" are futile if they do not change at the same time the cooperation and communication forms – hence the need for a critical stocktaking. One has to be willing to really find out how one's own work is actually being perceived by the schoolchildren or students, the parents, the school administration, the recruiting companies or further education institutes as well as by the colleagues, if one really wants to know where to start on the way to a "learning school".

These introductory comments already show clearly that school development is a project that can only be successful if the inner conditions of the people involved as well as the outer basic conditions allow any development. "Old wine in new skins" keeps the self-organisation forces on which school development depends already in the bud because a trust culture between the actors cannot come into existence and all new approaches within the aforementioned centrifugal forces of our habits fall flat. Hans-Günther Rolff, the German school development specialist, therefore rightly focuses on "self-organisation" and the "organisation development" as the central mechanisms of change in schools and writes:

"Consistent school development leads to organisation learning. The goals and the methods of school development can be described as self-organisation, and self-organisation requires organisation development. (...) Organisation development (OD) is an approach to developing an organisation from within. OD is an open, planned, purposeful and long-term procedure dealing with change requirements and change intentions in social systems. OD is not only techniques and methods. In an organisation development process, many techniques are being applied for certain; however, the attitudes to humans which become visible in this process are the decisive factor and influence the credibility of the motives and the intentions." (Rolff 1993, p. 147 and 153).

With these words everything is said: Of course, school development needs experts who know how to shape change processes effectively in the sense of a ridge walk between securing acceptance and tackling dissension, that is, in a way that objectives and claims do not get lost. Sufficient research and work on successful strategies, instruments and procedures has been done up to now, so that it "suffices" to give teachers in basic and further training processes access to these experiences. And this is urgently needed, since teachers so far have only learned to conceive their fields of activity in exclusively individual-pedagogic ways (= individual competence development) and not in an organisation-pedagogic way (=organisation development). It is hardly surprising that teachers – apart from exceptions – hardly have systematic and organisation-pedagogic knowledge about the question of

"(...) how it is possible not to abandon organisations, whose development is most intricately influenced by manifold inner factors and outer relations, to quasi-natural momentum, but, instead, to rationally enlighten them in the sense of organisation development i.e. through organisation learning in order to recognise and realise possibilities of influencing and structuring" (Geißler 2000, p. 7).

Taking Constructivism seriously, it is also claimed that systems cannot be changed "from outside"; but they can develop from within. To set this development going, schools need no mentors or controllers, but coaches who help the teacher team and the principal, but also the people concerned to determine their own objectives and resources. A school programme evolving in this way – from the bottom – deserves its name; one that is merely considered as a new compulsory exercise is in fact no school

programme. External – unbiased – process coaching merely setting necessary processes formally going, seems to be in this first stage mostly indispensable; nonetheless, the people involved have to build up their own competences in order to be able to structure their everyday life in a lastingly project-orientated way (with objectives, responsibilities, timeline etc.) and to scrutinise it on their own in a criterion-orientated way.

Illustration 5: Competence Fields

Competence field of professional school development

School development requires an organisation-pedagogic know-how. On the one hand, teachers need support; on the other hand, they have to develop their own organisation-pedagogic competences in order to reinvent their schools as "learning organisations". The following competence fields are important in this context:

- > Consultancy as process consultancy
- > Presentation of small and large groups
- > Structuring contacts and contracts
- > Clarifying expectations and roles
- > Guiding dialogues
- > Self-regulation
- > Diagnosis methods
- > Project management
- > Conflict management
- > Evaluation

(Rolff et al. 2000, p.50)

Strengthening Professional Communities as a School Development Strategy

In the American school development debate, Sharon Kruse et al. have referred to the fact that the development of professional teams has numerous implications for other reform areas. In particular, the strengthening of the role and responsibility of the teachers does not necessarily improve class work, there are rather effects to be observed through which increasingly bureaucratic activities negatively influence the actual pedagogic level, whether that they tie resources into bundles or that they increase the inner detachment of the teachers from the main interest. For this reason it is necessary to create further conditions:

„There must be support within the school for teachers who want to take risks and try new techniques and ideas. Otherwise, serious and lasting change cannot be sustained“ (Kruse et al. 1994, p.4).

For this reason structural as well as social conditions have to be created in order that professional teams i.e. staffs can really unfold their enormous shaping potentials. Such fundamental conditions are (according to ibid. p. 4f):

- > **“Time to meet and talk”:** in order to enhance a regular exchange and cooperative self-organisation. It is necessary to introduce discussion hours to the syllabus at fixed hours. Ideally, it should be possible to have daily meetings at the specialist subject teacher and class teacher level, but also regular sessions of the whole staff. It is critical that these sessions are not only “used up” for the execution of administrative affairs (which frequently even need not be discussed in a plenum), but rather provide enough time for the criterion-orientated reflection on one’s own work.
- > **“Physical proximity”:** This means that the workplaces for teachers mostly lead to a spatial isolation since the rooms for common meetings for

discussing classroom practice are missing. The “policy of closed classroom doors” is also damaging for the development of a sense of common responsibility and leads to the persistence of handed-down agreements, as for example the idea that teaching is every teacher’s “own business”

- > **“Independent teaching roles”:** Schools that develop over the strengthening of professional cooperativeness of teachers have to purposefully create scopes in which the teachers can work together. The aforementioned forms of joint development of specialist subject teaching or of joint development of methodical competences of the schoolchildren and students do provide basic possibilities for the initiation of an adequate cooperation. Nonetheless, these occasion-related co-operations are only the beginning of a really organisation-shaping cooperation:

„The team provides a lasting, substantial structure for sustaining communication based in shared goals. As teachers work together, they develop a sense of community and a greater sense of effectiveness“ (ibid. p.5).

- > **“Communication structures”:** In addition to this, the strengthening of professional communication in the staff increasingly leads to a routine as well as established forms of exchange of ideas in the sense of a network for discussion of experiences with regard to teaching, curriculum, assessment and other professional concerns. This network can and should be systematically supported and made “visible” through the use of electronic media (mail-systems, chat-rooms, and platforms).
- > **“Teacher empowerment and school autonomy”:** This context refers to the actual broad education policy effect of a school development being directed towards a strengthened professional self-regulation and communication. Strongly professional-orientated staffs and teams stand at the same time for a higher degree of teacher auto-

my since teachers with a clearly stronger co-shaping possibilities in the professional matters of their discipline also develop a higher degree of responsibility:

„The flexibility allows them to respond to the specific needs they see. Instead of being guided by rules, they are guided by the norms and beliefs of the professional community“ (ibid. p.5).

> These structural conditions do guarantee, however, only a frame in which professional cooperation can effectively unfold – but does not “have to”. To “fill” this frame, attitudes and skills have to develop that are also and especially accompanied by high expectations on the personal growth of the teachers.

Teachers are not managers, even though they take on managerial tasks in their everyday business: They plan and arrange classes, give instructions, organise help, assess and encourage – all of which are activities that managers have to do and are doing. But still there is a decisive difference – in my view – between a pedagogic-didactic guidance of teaching-learning processes and what teachers are expected to achieve when, as principals, having to guide teacher teams and to shape school development processes: They must be able to think and act in a project and organisation orientated way, and they must likewise be able to be a convincingly self-reflexive authority.

Social-emotional Resources of Professional Collegiality

However, it is not only the managers that have to develop their emotional self-reflexivity to have the inner strength to guide a cooperative-orientated development. The development of school collegiality is also dependent on the social-emotional resources of the teachers. Not only their own general – at times problematic – relationship to authorities but

also their own social-emotional resources are of major importance for the success of a collegiality enhancing school development.

In this sense, Kruse et al. are speaking of five aspects that are – on the part of the staff – of major importance for the promotion of a professional collegiality. The first three aspects refer to the mentality structures prevailing in a staff while the aspect before last refers to the management:

- > “Openness to improvement”: Teachers have to be and remain open to innovation and change. School development needs teachers who are willing to take risks and try out ideas. Therefore, the willingness to change is a necessary professional attitude that can, however, only develop, if the actors have the possibility to experience that their learning and research activities as well as their efforts to consolidate and widen the professional scope of action are being effectively supported.
- > “Trust and respect”: Teachers must be able to “feel” that their specific professional experience and competence are appreciated in school as well as in the school environment and the society:

“Respect, trust and a shared sense of loyalty build professional commitment and the cooperation required for collaboration and shared decision making“ (ibid.).

- > “Cognitive and skill base”: Successful class teaching is also based on the competences, skills and experiences of the professional teachers. This is the reason why the teachers must also be enabled to secure and develop this knowledge and competence basis in a self-directed way:

“Structures such as peer counselling, along with help from external sources, can spread that expertise among faculty members, and can thereby help marginal or ineffective teachers improve“ (ibid.).

> "Supportive Leadership": Supportive leadership by one person or several people is based on the central focus this leadership moves into the foreground. If principals only contact the staff in administrative matters, then this administration view will also build the core of staff development – which indeed is no real development! In contrast to this, a school administration wishing to enhance collegiality first of all has to understand itself as "a prime >keeper< of the school vision" (ibid.):

"Leadership needs to keep the school focused on shared purpose, continuous improvement and collaboration. Communications from the schools leadership will set the tone for the school. For example, if a principal contacts the faculty only on matters of organisational procedure, teachers will see these as the school's major concern and may give less attention to teaching and learning" (ibid.).

> "Socialisation": Each school continuously recruits new teachers without systematically guaranteeing that a systematic contact of those teachers with the school vision in practice is established and without facilitating an adequate enculturation. Thus, the vision often remains obscure – a reason why the question as to whether the new teacher in fact shares and visibly lives the school vision is more or less left to chance:

"Staff must impart a sense that new teachers are an important and productive part of a meaningful collective. School culture must encourage some behaviours and discourage others, in a daily process aimed at working toward the school mission" (ibid.).

In the field of teacher training, the competence model has become more and more important in the last years. Thereby, the concept originating from vocational training research is permeating into areas where so far the idea has been prevailing that a scientific education would also be a guarantee for the development of interdisciplinary social and emotional competences and a basic change

competence. The whole thing started with the concept of key qualifications that basically aimed at pushing the development of overall action competencies stronger to the fore. There was and still is a growing feeling of uneasiness with regards to the education practice that is generally marked by imparting knowledge in learning cultures of didactic teaching, that is, chalk and talk. The undesired side effects of such a "knowledge feed" became increasingly clearer. People that were socialised in such a way developed only little confidence in their own potentials since they were used to the fact that their learning efforts first of all were meant to be a kind of adaptation learning i.e. a – according to Klaus Holzkamp – "defensive learning", that is, a learning aimed at avoiding disadvantages (e.g. lack of qualifications).

It is hardly surprising that the learning attitudes thereby developing are rather of a pessimistic nature. It is hardly surprising that adaptation learners develop little sensitivity for their own importance and do not realise that they are not only recipients but also producers of knowledge and problem solving. And it is hardly surprising that the people trained that way later on are not sufficiently motivated and have not enough self-competences and strategies in order to shape, change or develop their working environment.

On Balance: Enhancing Corporate Collegiality

To enhance corporate i.e. school collegiality thus on the one hand needs knowledge about structural aspects that are to be taken into account, and on the other hand, the necessary social-emotional resources. Summarising the differences mainly gathered by Kruse et al. (1994), a foil results against the background where a collegiality enhancing school development has to justify its objectives, its proceedings, and the selection of its "measure":

Illustration 6: Tableau for Leadership in Learning Systems

Social and human resources	Openness to improvement	Trust and respect	Cognitive and skill base	Supportive leadership	Socialisation
Critical elements					
Reflective Dialog	Objective: Enhancing professional collegiality Strategy: Empowerment of teacher-competences and promotion of the social-emotional self-reflexivity in the field of guiding and being guided				
De-privatisation of practice					
Collective focus on student learning					
Collaboration					
Shared norms and values					

5. How Can Projects be Successfully Managed?

The central managerial form of modern corporate human resource development is the project management. Companies that attribute a strategic value to the mid-term and long-term assurance of their human resources, cope with the emerging tasks by defining them as projects and by accordingly shaping them. The basic features of a project management are clear objectives, transparency and process orientation. Moreover, the integration of the staff in the field of structuring projects and putting them into practice will be of major importance. The managers on the other hand must have adequate managerial instruments that allow them to formally control the implementation. Of fundamental importance is also the quality assurance of the measures taken up in the corporate human resource development (e.g. further training measures).

Example: Introduction of a mentoring system in the corporate human resource development

"Mentoring" stands for a concept of training and coaching a company's qualified employees by more experienced and mostly elder colleagues. By this, these mentors become important actors in the company's competence development. At the same time, this form of human resource development guarantees the preservation or the transfer of organisational knowledge: Elder and experienced employees become the "baton carriers" of knowledge and like in relay race give their experience from one generation to the other. In the context of demographic changes, this aspect increasingly gains in importance.

In their function as a role model or a contact, elder and experienced colleagues coach the "newcomers". Another important assignment is to introduce those newcomers into the evolved routines, the culture and the network structures of the company. Thus, mentors are assistants that additionally assume basic functions for the integration of the social context "company". The mentors are also strongly

effective as a person – a reason why it is important to pay attention to qualifications when it comes to selecting the mentors. Moreover, the decision must be taken as to whether a formal agreement between the mentor and the mentees seems useful if the purpose of this coaching is meant to be the transfer of knowledge. Eventually, it can also be useful to assign an external qualified person (e.g. from another branch or subsidiary or from a supplier company) with the coaching – which is above all useful in the field of knowledge and competence transfer that do not or not yet exist in the targeted company.

The advantages of a mentoring programme are – amongst other things (according to Krämer-Stützl 2004):

- > "Staff integration: The systematic introduction of new employees into the company, a new department or a new function is actually a simple and economical measure of human resource development which, however, is often neglected in a company's business. The way new employees get to know colleagues, organisations and roles is crucial for them and the company in the long-term.
- > Staff motivation: In the beginning, the "newcomers" have little contact. They are generally unsure in their new roles. Their first impression of a company plays an important role for the commitment, their attitude and behaviour towards the company.
- > Costs: The lack of introduction or a bad introduction can lead – beside insufficient motivation – under certain circumstances to a notice already during the first days or weeks. The costs for a (new) staff selection thereby redouble.
- > Promotion of the corporate culture: With a systematic introduction it is possible to give the goals, principles and rules to the staff right from the beginning. The new employee then knows what he can expect of the company and what the company expects from him.

- > Image increase: Through the formal character and – with a cross-mentoring programme – the joint showing of different companies to the outside, the activities of the company are published. This is an additional marketing effect.
- > Insight into other corporate cultures: In the case a cross-mentoring programme is started, the mentors and mentees become acquainted with the company's strategies and cultures of other companies and link their network to the executives".

What should be respected if the corporate human resource development decides to introduce a mentoring system in the framework of a project-based management?

Antje Krämer-Stürzl differentiates the following four steps: Step 1: Mentees and mentors are selected and determined:

It is necessary first and foremost to develop an accurate qualification profile. Mentors are expected already to have leadership experiences and at best also to have completed a systematic selection procedure. Moreover, it should be seen to it that the selected mentors do have enough time and possibilities to properly assume their coaching tasks. Furthermore, their personality should suit the assignment, that is, they are supposed to know how to handle mistakes, criticism and uncertainties without getting demotivated.

Krämer-Stürzl takes the example of a major bank to define the qualification profile for mentors as follows:

Illustration 7: Occupation Profile of a Mentor

Occupation profile of a mentor (extract from a major bank)

The mentor is a supportive teacher who is willing to impart his knowledge, his experiences and success systems taken from his life with the (corporate) culture. He is no superior. It is rather the newly created relationships by help of this mentor that mark this development relationship and which might otherwise not exist in the company.

Tasks/functions

- > Role model function, e.g. for communication, identification, customer orientation
- > Joint analysis of problems/situations as well as help for self-help in problem solving
- > Target agreement on work performances and work conducts
- > Exchange of experiences
- > Transfer of information, knowledge, methods and individual success systems
- > Stabilisation/protection of the employee in critical problem situations, e.g. more complex, new (leadership) tasks.
- > Transfer of values
- > Door-opener, e.g. introducing juniors, creating chances and access to vocational – possibly also private – circles
- > Giving feedback on the strong points and deficiencies and on development steps
- > Possibility of cooperating in the assessment of performance and effectiveness of learning
- > Patron and coaching of practical learning projects of the staff, such as project management, consultant activities, customer representation
- > ...

Requirements: The mentor ...

- > is willing to invest time and energy in the professional and personal further development of the employees entrusted to him over a period of up to 2 years.
- > has a positive attitude towards the mentor's function as the fundamental contribution to the achievement of the company's goals as well as the goals of the employees.
- > knows how to handle conflicts which result from the area of conflict of one's own expectations and the expectations of the staff and the company.
- > identifies himself clearly with the company as well as with the concept of human resource development.
- > masters in an exemplary fashion the rules of communication and feedback.
- > knows and recognises his own strong points and weaknesses and those of others.
- > holds consultancy talks in view of the company and staff development.
- > has at least 3 years of company experience as an executive at the 2nd/3rd level (i.e. comparable function/position).
- > has successfully participated in a mentoring training.
- > is an experienced observer in the company.
- > is able in times of information flooding and over-stimulation as well as of turbulences to set concise and transparent goals with a view to sustainability.
- > ...

Further steps of systematic project management for the introduction of corporate mentoring systems are

- > setting the goals of the programmes (2nd step),
- > putting the agreed activities into practice (3rd step) and
- > goal control, final discussion and feedback (4th step)

These steps have to be planned and implemented in detail so that the corporate human resource development management is able to also purposefully use the possibility of formal guidance. Such a planning also helps to control and guarantee the achievement of goals during the process.

Example: Quality management

In corporate human resource development, quality is more than "customer satisfaction". But quality is also more than mere "legitimation" - an aspect that in many human resource development institutes and education departments is still the core of the efforts to control achievements and to assure quality: "Evaluation" is done to be able to document the company's success of further training for financial backers, enquirer and the "public". A thorough quality notion can in my opinion start from the assumption that

... quality is "quadrangular", that is, comprises four "types of achievements" which can be ascertained and documented separately and in different contexts: Beside the achievement of satisfaction and legitimacy also the achievement of learning or adoption and the achievement of transfer. All four types of achievements constitute an overall model, that is, "good quality" is achieved, if "positive" assessments i.e. results could be ascer-

tained in a criterion-orientated way in the field of all four types of achievements. In the concrete case, the underlying criteria have to be defined in dialogues ("dialogue with suppliers and participants as well").

The management of corporate human resource development also takes up the task to enhance the development of quality assurance systems systematically to assess the actual achievements of their own efforts.

The four types of achievements are, however, not easily "measured" since there are apart from the criteria also distortions to be found. Thus, after all we have gathered from the learning-teaching research, the satisfaction of the participants also facilitates their effective and ongoing learning. However, one can also be satisfied without having learned anything. And also the contrary might come up: Dissatisfaction can be "triggered off" by group dynamic processes or individual projections (overrating, fear of failure etc.) and does absolutely not give evidence for a "bad quality". Similar distortions can also be found with the other types of achievements. In the corporate further training for example, companies increasingly abandon the idea to send their participants to external seminars without making sure in advance that they are able and "allowed" to apply the acquired knowledge in their professional contexts. And also in the field of legitimating achievement, the lack of criterion-based strategy for quality assurance (QA) means that the ascertained data is accidental and with regards to business policy of little "relevance" (e.g. satisfaction assessment) and can neither be adequately assessed.

A concise strategy of quality assurance must decide - to my view - which types of achievement on the basis of which criteria (i.e. goals) and with which evaluation method it is going to analyse and for whom it is going to document the results.

Illustration 8: The "Quadrangularity" of Quality

	Distortions <ul style="list-style-type: none"> > Criteria-less judgements > Selective reaction > No strategy of QA („learning by crisis“) 	Criteria <ul style="list-style-type: none"> > Agreement > Acceptance > Expressions of well-being („happiness-sheets“) 	
Criteria <ul style="list-style-type: none"> > Dropout rate > Costs > Image effect 	Legitimacy-achievement	Satisfaction-achievement	Distortions <ul style="list-style-type: none"> > Group dynamics > Dissatisfaction with one's own achievement > Projections
	QUALITY	QUALITY	
Criteria <ul style="list-style-type: none"> > Memory achievement, problem awareness > Valid achievement assessments > Reliable measuring 	Learning-achievement	Transfer-achievement	Distortions <ul style="list-style-type: none"> > No adequate basic conditions for application > No acceptance through colleagues etc. > Deficient relevance for practice
	Distortions <ul style="list-style-type: none"> > No validity > No reliability > Restriction to memory knowledge 	Criteria <ul style="list-style-type: none"> > Application of what has been learned > Long-term effect > Sustainability 	

How can quality be assured, supported and controlled in a longlasting and unbureaucratic way?

How can quality assurance as a systematic project of corporate human resource development be established and developed? The basis first and foremost is a detailed understanding of the quality areas and a decision on the time-setting of quality assessment. The following differentiation might be use:

Illustration 9: Three Dimensional Model of Quality Assurance

	Input-quality	Process-quality	Output-quality
	Aspects that in the „preliminary stages“ of the „actual“ measure have to be assured	Aspects that become effective during the „actual“ measure	Aspects that become effective after the „actual“ measure
Quality areas, criteria	Conception > explicated self-perception > adult pedagogically founded	Infrastructure > beneficial to learning > providing	Conclusion > targeted > applicable
	Planning > matched to demand > participant-orientated > scientific > „blanket“ access	Professionalism > proficient > pedagogically qualified > consultative > intense	Satisfaction > profession-related > competence broadening > „career“ effective > stimulating
	Offer > transparent > continuous > (contents) broad > form variant	Didactics > motivating > adult suited > experience-orientated > action-orientated > reflective learning	Personality development > personality enhancing > stabilising > key qualifying (profitability)

In the three quality dimensions, the following key questions of such a professional quality assurance can be taken as the basis:

- Input quality:

- > What do we wish to achieve? What are the basic models for our action? Which targets do we wish to achieve in five years? etc. (= conception)
- > How do we plan? How do we make sure of the need and scientific nature of our measures? Do we reach all targeted groups we wish to reach? Which three activities can we initiate (every year) in order to receive a feedback for these questions? etc. (= planning)
- > Is our offer understood? Are we monotonous or creative in our proceedings and forms? How can we get an external feedback on these questions? (= offer)

- Process quality:

What do the participants feel like in our house (i.e. in the rooms where we realise our measures)? Do the "trappings" support and facilitate the learning process? etc. (= infrastructure)

Do we cooperate with professional lecturers, 'teachers' etc.? Do they address the participants in a supportive and intense way? etc. (= professionalism)

Is there a chance to learn in a dynamic and self-reflexive way in our measures? Which role do the experiences and the actions of the participants play in our measures? etc. (= didactics)

- Output quality

How high are the 'drop-out' and failure rates in our measures? Are the participants able to use the things they learned in our measure in their living and working world? Is our degree accredited by the economy, the society etc.? (= degree)

Are our participants satisfied with the planning and implementation of our measures? How do we experience this satisfaction in a continuous way? Which factors are particularly important for the participants' satisfaction? etc. (= satisfaction)

- > Do our measures also offer the chance of non-professional learning? Are our participants able to adopt key qualifications and to unfold their personality? Which systematic "efforts" do we make in order to intensify the non-specialist learning? (= personality development)

With the development of a systematic quality assurance, the rear view perspective of result-orientated management (slogan "Have we been successful?") is being replaced by a provision perspective (slogan "What can I do to not impair the overall result?"). It is necessary that the employees develop a skill in "active, in fact foresighted thinking". The efforts of the management are therefore to be directed more strongly towards the development of a foresighted success awareness of the employees, so that "success control" and "elimination of quality deficiencies" can be substituted by forms of self-responsibility and self-management in order to anticipate and thus avoid quality deficiencies".

Summary in Five Theses:

(1) The particularity of quality assurance within basic and further training processes is to find in the fact that the learning subject and the "product" are identical. In addition to this, "quality of further training" comprises more than customer satisfaction. It is rather – under adult pedagogic aspects – the focus on self-activity and activity of the learner that becomes more and more important. Both have to be enhanced in the scope of a self-organisation didactic ("facilitation didactic") by means of appropriate learning arrangements.

Prospective reference to a possible "application in corporate human resource development:

- > Development of a quality assurance concept that takes the particularity of the further training "product" as well as the self-activity and activity of the learner into account.

(2) "Good quality" is only definable in a multi-perspective way. In this sense, quality is "quadrangular": Success control and quality assurance generally refer to one, several or all aspects of the four types of achievement – legitimacy achievement, satisfaction achievement, learning achievement or transfer achievement. "Good quality" will be the result if in the field of all four types of achievement "positive" estimations or results can be ascertained.

Prospective reference to a possible "application" in corporate human resource development:

- > Differentiation of a four-dimensional quality assurance approach that allows to assess the achievement of legitimacy, satisfaction, learning and transfer.

(3) A non-bureaucratic strategy for quality assurance comprises two dimensions:
a) the assurance and optimisation of the processes (process optimisation) and
b) the promotion of success sensitivity and quality awareness of the persons in charge.

- > Prospective reference to a possible "application" in corporate human resource development:
Development of a two dimensional approach to quality assurance targeting process optimisation and success sensitivity.

(4) For the process optimisation it is helpful to clearly name the goals, to identify the processes, to define the interfaces and to clearly determine the customer-supplier relation and the dimensions.

Prospective reference to a possible "application" in corporate human resource development:

- > To develop a systematic (with interfaces, customer-supplier relations etc.) of the usual processes.

(5) Quality assurance is based on the quality and the quality awareness of the pedagogic planning and teaching staff. For the promotion of the success sensitivity of these employees it is helpful to initiate a continuous didactic self-evaluation that continuously "raises" the "aspects that are being assured in advance of the >actual measure (input) as well as the aspects that are to be assured during and after the >actual measure< (output) as the topic of colleague talks and of systematic self-reflection".

Prospective reference to a possible "application" in corporate human resource development:

- > to fan out, precise and apply the three-dimensional model of quality assurance with regard to upholder-specific concerns (programme types, target groups, realisation conditions etc.)

Quality and professionalism refer to each other in a correlative way: Quality is not conceivable without professionalism, and professionalism cannot remain credible in the long-run without quality assurance.

6. What Role Does the Human Resource Development Have in the Corporate Organisation Development?

Corporate human resource development has to initiate, assist and (co-)shape the necessary change of the corporate culture towards systemic-evolutionary openness and trust. What is required is in my view first and foremost a change of the well-worn "interpretation structures" of the executives and a further training for the staff that is strongly orientated towards non-specialist learning. Typical of a systemic-evolutionary form of corporate human resource development is the aforementioned trend that can be described with the following slogan: From control to provision. In the last years it has become more and more clear that the rear view perspective is no longer sufficient for the assessment of corporate developments (slogan "Have we been successful?). In international comparing research it has rather turned out that quality and success of companies increasingly depend on whether and in how far all participants are able to realise a provision perspective for success assurance (slogan "What can I do to not impair the overall result?").

Reinforcement of Self-direction: Capacity Building

The efforts of the management are therefore aimed at developing the foresighted success awareness of

the staff, so that "achievement control" and "elimination of quality deficiencies" can be replaced by forms of self-responsibility and self-direction in order to anticipate and thus avoid quality deficiencies".

Corporate human resource development is understood as a contribution to organisation development of the company. It is no longer (only) the further training of the individual employee being the focal point of the concept and the self-perception of the corporate human resource developers. The concept rather deals with the overall development of the learning culture in the company.

This point is rather complex, since the learning culture comes to light at almost all levels of corporate cooperation and work and also determines the decision and leadership patterns. A change from the bureaucratic human resource management into company-orientated human resource development is needed that is accompanied by a four-fold expansion of the HRD-view:

Illustration 10: The Four-fold Expansion of the HRD-view

Formerly	Today
Know-how-adaptation (deficit orientation)	Know-how-to-know as a structuring potential (potential orientation)
Simultaneous human resource development	Anticipating human resource development
Organisation development	Learning Organisation
Teaching und leading	Presentation of corporate self-organisation

People develop their vocational activity competences mainly and mostly in the context of their professional everyday business through informal learning.

People mainly develop their professional skills at work through informal learning. In various international studies the extent of informal competence acquisition is assessed at 70 to 90% (see Dohmen 2001, p. 7 and 178). In 1977 already, the OECD concluded that self-directed learning (as the conscious part of informal learning) represents "approximately two thirds of the total learning efforts of adults" (OECD 1977, p. 20). This informal learning is in-house learning, i.e. learning at the workplace. The qualification level a country or region in international competition can refer to is therefore not only – and often even not predominantly – dependent on formal education and training openings. It is more important what possibilities of learning and competence development the company's everyday life can provide.

The performance a human resource development can offer in a company is regarded as a contribution to the evolution of the company, that is, of its personnel and organisation structures. The mere planning and implementation of seminars and programme offers are replaced by a coaching of problem solving processes in the departments of the company. The human resource developers are acting as qualification consultants and as coaches of change processes "on site". They strengthen the

capacity of the company – a reason why "capacity building" is more and more asserting itself as the new central paradigm of corporate human resource development – in particular in the view of developing regions. This concept starts from the interdisciplinary objective that the development and change has to lead to the following result:

„Strengthening people's capacity to determine their own values and priorities, and to organise themselves to act on these, is the basis of development“ (Eade/ Williams 1995, p. 9).

The concept basically is a change concept. It starts from the question how changes can be stimulated. The focal point is self-organisation of those who have to solve and manage problems "on site" (in the regions, organisations or companies). In this context, the corporate human resource development also gains a new substance. Corporate further training takes over a new function as an instance for co-shaping and improvement of the structuring and action capacity of corporate systems whose self-organisation potentials can however only be promoted through self-organisation of the people living, working and learning in this system. The progress capacity of companies is thus dependent on the learning capacity of their employees. Their progress, in turn, is dependent on the change and learning capacity of the companies.

Management of Corporate Self-organisation

For a long time, the concepts of corporate human resource development presupposed that processes, and also learning processes, could be directed in a rational and linear way. Today, however, the situations where it is impossible to say what is right or wrong have become a custom. Contradictions, oppositions, questions, uncertainties, conflicts are the order of the day in the fast-moving modern age. It can be "fatal" to keep to the well established and to overlook necessary adaptations and changes.

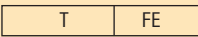

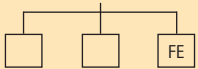
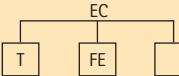
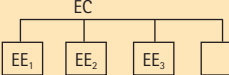
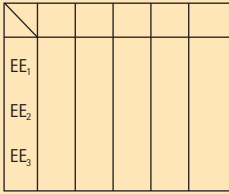
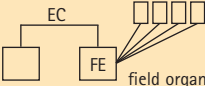
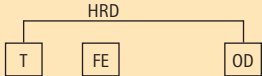
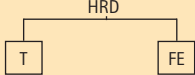
Corporate human resource development often takes over a pro-active function. This means, it prepares the employees for the changes, tries to convince them to follow new paths and to give up the well known and familiar. By this, the corporate human resource development has entered a new phase today that will fundamentally change it.

The development of further training has been described already by Hölterhoff/Becker (1986) with its characteristics, basic principles and targets etc. with the help of "three generations of further training programmes":

Illustration 11: Change in Further Training Programmes

Phases	Institutionalisation phase or the first generation of corporate further training programmes	Differentiation phase or second generation of corporate further training programmes	Integration phase or third generation of corporate further training programmes
Characteristics	Company recognises necessity to supplement the corporate basic training with further training activities. Institutionalising of the adult education specialists	Systematisation of the corporate training programmes. Differentiated function cycle: "From requirement analysis to achievement control", central point: transfer control	Farewell to the role conception of the „teacher in the adult education“. Further training employees are acting as the „process consultants“ in the sense of international consultants and change agents.
Basic principles of further training programmes	Generally not yet formulated.	Human resource development has the rank of a non-transferable management task. Human resource development is requirement-orientated, takes individual learning needs as well as the learning needs of the company into account.	Education and organisation development in integrative associations. Problem solving of technical, organisational issue problems and communication problems by integrating the people directly concerned. Planned organisational change within and between the natural organisation divisions.
Upholders of the further training programmes	Further training department i.e. further training expert	Superiors, further training representatives (field organisation) and the education department as their cooperation partner.	An organisation division orientated towards problem solving; further training and OD-specialist as problem solving consultant.

Phases	Institutionalisation phase or the first generation of corporate further training programmes	Differentiation phase or second generation of corporate further training programmes	Integration phase or third generation of corporate further training programmes
Objectives of the further training programmes	Expansion of the staff coaching activities and further training offers, also with the tendency towards „education as a reward“.	Imparting of knowledge and skills with the aim of performance improvements and heightening of selected employees.	Heightening of the problem solving potentials and thus in the broadest sense heightening of efficiency of an organisation division and/or of the total organisation. Improvement of quality of the working life of the people working there.
Addresses of the further training programme	Separate employees, often also without concrete relevance to the factual problem situation.	Separate employees, ascertains the requirement analysis for concrete problem solving references through application of systematic methods.	Staff of an organisation division (e.g. superiors, employees) or interdisciplinary groups with common problem solving goal.
Type of further training programme	Sending employees to seminars; at the beginning mainly external ones, then development of internal further training programmes through the education department; seminar participation without compulsory implementation duty.	At first, systematic requirement analysis, then training planning, internal and external implementation.	Team-orientated on-the-job-training within the organisation family or in the interdisciplinary teas, problem solving supporting training for the promotion of problem sensitivity, purposeful training as problem solving measure.
Procedure	Education department draws up seminar catalogue and tries to attract many participants in the company. Willingness to send employees to seminars is dependent > on the one hand on the openness towards education necessities (sometimes also on the social commitment) of the superiors, > on the other hand, on the willingness to learn (here and then also on the "casualness") of the employees.	<ul style="list-style-type: none"> > Requirement analysis > Setting goals > Creative planning and shaping of the training > Implementing the training > Achievement control, at best by integrating the addressees before and after the measure > Decrease of the transfer problematic 	Company signals problem. OD specialist works as a process consultant: Establishing the actual state together with the people concerned, data gathering, data feedback, problem identification. Analysis of the causes. Setting goals. Planning and implementing measures. Achievement control. During the total process application of the respectively reasonable intervention types. Objective: help to self-help. Training activity in the sense of traditional education work is – if anything – only one of the possible solutions.
Procedures of achievement control	It is reduced to – if at all carried through – learning achievement control and „manoeuvre critique“ at the end of seminars.	Application of differentiated procedures on <ul style="list-style-type: none"> > learning performance imparting > cost and profit analysis (corporate achievement control) > transfer control 	Achievement control in a concrete organisation development project. Employees integrated into the problem solving process immediately assess the success of the measure and initiate feedback measure if necessary.

Phases	Institutionalisation phase or the first generation of corporate further training programmes	Differentiation phase or second generation of corporate further training programmes	Integration phase or third generation of corporate further training programmes
Transfer problematic	It is not being perceived yet in its extents.	It still exists despite of systematic and differentiated achievement controls. Training addressees have only rarely the occasion to realise their individually desirable or necessary behaviour changes in their organisation division. They often fail because of human behaviour.	Is overcome by consistently and logically applying the organisation development principles.
Organisation forms	<p>Alternatives:</p> <p>> Training department</p> <p>> Human resource development</p>  <p>> Staff</p>  	<p>Alternatives:</p>  functional <p>EC</p>  divisional <p>EC</p>  Matrix <p>EC</p>  field organisation	<p>Alternatives:</p>  
Qualification-characteristics	Teachers in the adult education	Education specialists	Process consultant education and organisation development

Legend: T = training, FE = further education, S = Staff, EC = education system; EE1-3 = education experts, HRD= human resource development, OD = organisation development

Source: (Hölterhoff/Becker 19986, p. 38f.)

This portrayal documents the changed orientation of corporate human resource development and the fundamental changes in the responsibility of those who perform functions in it. Three aspects come to the fore: a strategic, pro-active alignment, the dovetailing of further education with human resource and organisation development as well as the changed role of the further education trainers.

In connection to this, the traditional human development conceptions are replaced by the concept of organisation learning in particular. The traditional conceptions were based on the further training of separate employees and aligned with technological requirements or job market demands. In contrast to this, organisation learning requires that the individual employees do not only continuously acquire specialist knowledge but apart from this are also able to learn autonomously and in a self-directed way. The capacity for autonomous and life-long learning is thus the central characteristic of learning organisations. And it is the managerial task to see to it that a company's staff does not only have the know-how, but also the know-how-to-know in order to be able to keep their workplaces and at the same time to constantly develop the organisational structures.

In addition to this, organisational learning is based on a far-reaching learning concept: It does not only gear to the acquisition of new knowledge, new capacities and new skills, but also to the question of how to assess goals as well as the values directing the actions. Learning organisations are characterised by the fact that they are increasingly dependent on their staff's capacity for goal-value-reflective learning. This again can only be expected if the scopes for action at the workplaces actually "allow" everyone to at least co-determine the goals and values of their own work. The workplace turns out to be an essential learning place of organisational learning. A learning form that goes beyond the single-loop and double-loop learning is being described with a little unusual notion of deuterio learning. Deuterio learning is a form of learning not only "acquiring" a learning object

(single-loop learning) and not only reflecting on the goals and values of its application contexts (double-loop learning) but beyond this, does also reflect on the learning and working process itself. This most complex learning form is characterised by the organisation members' possibility to take decisions on the appropriateness of the subordinated learning forms.

This third learning form that deals with the reflection on the practiced learning and work processes is also typical of learning-conscious organisations. In such organisations, the employees do not only "know about" their own learning, but they are also able to apply learning strategies and to organise their learning processes in a self-directed way. Learning-conscious organisations are places where teaching i.e. prescribing scarcely takes place. The corporate basis and further training rather aims at "ensuring" that the organisation members have a know-how-to-know at hand. This know-how-to-know is made up of self-development competences that enable the employees to organise their (!) learning processes by themselves while still remaining responsible for the processes. Learning i.e. learning-conscious organisations are therefore also characterised by other learning cultures. These are less teacher and leader-based, and in these cultures the attitude is being lived and imparted that learning in organisations can only be initiated and shaped by the individual employees themselves. Human resource developers, further education trainers and executives therefore have the task to facilitate and stimulate self-directed learning. Enforcement and obedience, but also motivation and sanctions, must be replaced by a learning culture that is "visibly" lived and purposefully promotes the self-direction capacities of their subjects.

In this sense, it is necessary to restructure the teaching, i.e. learning in corporate (basic and) further training. The new teaching-learning-paradigm is characterised – among other things – by the following features:

1. The learning process is orientated towards complex, true-to-life-and-work, integral problem fields.
2. Learning is an active process. Objective knowledge is integrated into one's own experiences.
3. Collective i.e. social learning in groups broadens one's own perspectives by jointly developing possible solutions that prompt each one to rethink his or her own interpretations.
4. Dealing with mistakes, discussing, analysing, reflecting and correcting of mistakes helps to broaden the understanding for ways of problem solving.
5. The learning fields are aligned with the interests of the learners and the goals of the company.
6. By actively tackling complex problems in a self-directed way and by taking experiences into account, the learning is orientated to the entire personality.
7. External evaluation is replaced by self-evaluation.

Corporate human resource development in this sense is a transformation process in which the former knowledge, comprehension and capacity constantly broadens and widens through new experiences. New information is integrated into personal experiences and thus broadens the personal knowledge and skills. The "teacher" (whether it be the education

managers, the superiors, colleagues or further education trainers) provides for learning arrangements to enhance self-directed ways of learning. The extent of a teacher's intervention into this process depends among other things on the situation or the target group. The advisory guidance and shaping of learning processes (process management) is first and foremost a promotion of key qualifications, thinking and reflection.

In order to meet the aforementioned new demands on corporate human resource development, an organisation needs to have professional training consultants or managers at its disposal. These new demands can be transferred to the permanent staff of the education institutes, the human resource development or even to the executives who help shape the human resource development directly on site, which in fact presents a non-transferable management assignment. The addressees are in particular the field of further training i.e. human resource development itself, the further education trainers on site supporting the ongoing process of further training, the superiors and the staff.

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