

# Microlearning in Trade Union Education

Designing and Implementing Innovative Educational Services

Using Microcontent

## (Changing Patterns of Learning: Schools, Universities, Vocational Training)

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This paper presents a case from the often neglected yet very instructive field of trade union education and examines how microcontent was used in designing new educational services that extend and enhance the traditional, classroom based learning environment provided in this field.

The aim is to point the attention to relevant success factors and research issues which can be discovered in that particular case and may help develop the use of microlearning and microcontent in educational contexts further. On a second level I would like to contribute to the ongoing discussion<sup>1</sup> on the role of informal education and the question if and how it can be supported by educational institutes or even be integrated in their portfolios. My thesis is that this can be possible without touching or destroying the genuine culture and value of informal learning – if done with care and a viable concept. The learning from this case may in this perspective lead to a general model applicable by different kinds of educational institutes.

### 1. Challenges in Trade Union Education

Trade union education can be seen as a collective name describing a mixture of organized activities in different educational spheres. To a large extend it is dealing with forms of civic education which are openly offered to adults and youth. These activities are usu-

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1 Cf. positions of G. Siemens, J. Cross and others.

ally based on trade union values and aim to promote these values towards society. To a lesser extent the term also refers to those educational activities which are organized to serve the development of human resources within trade union organizations themselves. However, the largest share in all of which is perceived as trade union education – and the most interesting one – is that of the training provided for shop stewards (Vertrauensleute), members of works councils (Betriebsratsmitglieder) and trade union representatives in the board of (large) companies (Aufsichtsräte) or in other words: organized educational services for institutionalized and to a growing extent also professionalized functions in industrial relations.

### 1.1 Training Members of Works Councils

In German industry, the service and the public sector roundabout 300.000 elected members of works councils (Betriebsräte) hold the mandate to represent the workforce. Most of them work on a volunteer basis and thus engage in an extra activity next to their learned profession and their “official” job at the company. Only about 20% are working on a full time basis. All are elected for a four year term and have to be reelected or continue with their actual job afterwards. On this basis education and training become crucial for the functioning of a works council. German labour law consequently stresses the important role of education by guaranteeing any member of a works council access to education, or to put it precisely, it guarantees them the right to visit seminars (“Schulungen” lt. BetrVG, §37, Abs. 6) and forces their company to pay for the costs – as long as the subject of the particular course is crucial for the fulfillment of the tasks of the works council of the company. As a matter of fact, German labour not only guarantees access to education it demands from any member of a works council to actively engage in it<sup>2</sup>.

The tasks of a member of a works council, which education should enable them to fulfill, are not limited to organizing and representing the collective will and the interests of the workforce but in many fields also include the responsibility to co-manage the com-

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2 Despite this, studies show that only about 35 % of all members of works councils do attend seminars and courses to qualify themselves for their mandate. One of the basic reasons not to do so is lack of time – basically a problem for works councils with members working on part time basis and for SMEs.

pany on behalf of them. Beyond basic competencies in managing boards and meetings this requires up-to-date expertise in highly specialized domains of knowledge from the world of labour and industrial relations. The broad range of complex subjects they have to cope with in their daily work, often mixed and intertwined, starts with legal matters, – labour law in particular –, as the most obvious and irredeemable ones, and are followed by economics and management as well as health and safety issues or ICT. In all of these subjects they are asked to argue, decide and act appropriately and in accordance with the state of the science. And as crisis becomes a steady state in most industries and companies they are asked to do so under enormous stress and with large ethical burdens.

### **1.2 Understanding the Learning Ecology of Members of Works Councils**

To work as a member of a works council, it is often said, means working in one of the most learning rich environments that can be found in a company. It is defined by multi-tasking, constantly changing situations and a broad range of subjects matters.

A close examination of the learning ecology of works councils shows clearly that – despite the almost unique focus of trade unions and German labour law on formal education and traditional classroom learning – the vast majority of the knowledge, expertise and competencies used in their daily work derives from informal, self organized or unorganized forms of learning. A recent study<sup>3</sup> provided strong evidences for this assumption. Whereas 51 % of the interviewees (mostly members of works councils and the board of companies) said they would consult the internet in case they need help to solve a problem connected to their tasks as workers representative, only 42 % mentioned seminars and conferences. In total – it turns out to be the most unlikely path to follow for them. In contrast to that 65–75 % would rather consult a colleague, an expert or – most likely – printed material (books, papers etc.). In other words: the basic thing to understand is that the existing and well established learning ecology of a works council is much broader and deeply rooted in the daily practices of all members of a works council than had been taken into account from the limited point of view of institutionalized trade union education.

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3 Hovestadt (2005)

Thus, taking this kind of unlimited view on the whole **learning ecology** of works councils leads to a revised insight into the motives of its members for attending seminars and courses as they do within the established institutions of trade union education. Rather than education it is solutions for current problems that they are looking for – once their daily routines of finding crucial pieces of knowledge fail. Routinely and on a daily basis they are in need of quick access to such very specific pieces of information in support of either collective decision making and consulting processes or the closing of individual skill gaps. The ranking found in the answers of the study cited gives clear evidence that they are looking for it within their personal environment, in a social as well as in a spatial sense. In other words the learning ecology of members of works councils should be described as a personal learning environment, where institutionalized learning spaces and organized education are only one (minor!) element. And one of the additional interpretations one may draw from the data cited above may be that they, following their preferences, rate these personal resources possibly as more reliable or efficient ones than seminars.

Likewise, attention needs to be turned towards the learning styles of this particular target group. They are working and acting in an environment which leaves hardly any place for reflection and learning on stock. They have to act and acquire knowledge often simultaneously and under enormous pressure (limited time budgets, heavy workload, „sandwich-position“ between management and companies workforce, etc.). The tasks they are involved in change constantly, they have to inform, consult, discuss, negotiate and decide on issues which are highly complex and are evolving permanently. To manage that, occasional learning and learning in action has become a habitualized behavior and must be seen as their standard mode of operating. Hence usability, relevance, action orientation and up-to-datedness come first! Knowledge is essential and needs to be at hands quickly, thus for them effectiveness in acquiring knowledge is a top priority. Consequently their learning style should be regarded as a form of personal knowledge management. Supporting effectiveness should become one of the main goals for educators.

Following this line of thought it is interesting to take a second look at the finding, that almost half of them would consult the internet and prefer this to attending a seminar. As with most other target groups, the internet, especially the google search engine, obviously plays a significant and growing role in the individual knowledge management of almost any trade or profession. As the study shows, this is true for members of

works councils in the same way as for others. Two different studies that were conducted to examine the daily work of a member of a works council prove that they make use of the internet as an alternative or even preferred medium to acquire knowledge and expertise when needed. Two quotes demonstrate how the established routine of asking ones trade union (representative) whenever a problem occurs that cannot be solved with existing resources and knowledge is now more and more being substituted by looking for help on the internet (or "asking" google):

*„You don't have to take the long way to your local trade union or to ‚Düsseldorf‘ [formerly location of the DGB headquarter and until today, of the DGB Bildungswerk] to get an answer. You go into the Internet [...] and within an hour you know, what you wanted to know.“*

– member of a workers council quoted in a research study for IG Metall NRW (2001)

*„You only get an information from IG Metall [German metal workers union, largest union in the world] if you can show your membership card and number. Even if you are in trouble they don't help you otherwise. With the New Media getting the information you need online is as quick as trying to get help from them on the phone. I prefer the Internet...“*

– member of a workers council quoted in a research study for Hans-Böckler-Stiftung (2005)

These quotes do point the attention to the fact that trade union organizations do not deliver adequate support for informal ways of learning and acquiring knowledge online. As a starting point for that we, like anyone designing educational services and innovations in education have to understand that learning is (already) highly integrated into the daily (work-) life of professionals like members of works councils or similar target groups. It is also undeniably true that the rise of technology at most workplaces has changed or at least influenced individual learning styles. Designing innovations in education has to respect and connect to these pre-existing learning ecologies rather than to flatten and destroy them.

The success of the educational service described in this paper is a perfect proof for this thesis. It gives an example of how an educational service using technology and micro-

content was designed “organically out of the media practices” (Lindner, 2006) of the target group. It works almost like piggy backing on the “routine activities of everyday digital life”(Lindner, 2006). With an example like this it also becomes clear that the “Googlization” of learning styles is not restricted to tech kids or an imaginary “homo zappiens”. We will see what the consequences of this view can look like if seen as an opportunity for the design of intelligent educational services.

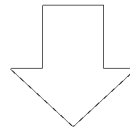
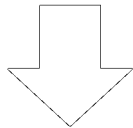
## 2. Designing Educational Services for Members of Works Councils Using Microcontent

### 2.1 Analyzing the Knowledge Base of a Works Council

By clustering the items found in the research quoted above and as a first approximation to describe the knowledge base of a works council we used the distinction of knowledge *for* and knowledge *from* members of works councils as the two most basic categories.

Although these categories should be regarded as “ideal types” they turned out to be of extreme practical value. Both could be and were used as a foundation stone in the construction of the architecture of the knowledge server to be built. Knowledge for members of works councils was collected in a “knowledge stock” which was then organized along domain- and action based hierarchies. Likewise Knowledge Communities were built in order to catalyze and support the knowledge production and sharing within the boundaries of the institutionalized roles in industrial relations such as members of works councils, chairmen of works councils, members of the board of a company, health and safety experts, representatives of handicapped staff, data protection representatives etc.

Knowledge base of a works council	
Knowledge FOR MWC	Knowledge FROM MWC
<ul style="list-style-type: none"> <li>• explicit knowledge</li> <li>• edited expertise</li> <li>• decontextualized</li> <li>• quality assured</li> </ul>	<ul style="list-style-type: none"> <li>• implicit knowledge</li> <li>• unedited experience</li> <li>• contextualized</li> <li>• rated, criticized, commented</li> </ul>



Knowledge Stock	Knowledge Communities
<p>= <i>domain and action based structure</i></p> <ul style="list-style-type: none"> <li>• labour law</li> <li>• economics</li> <li>• welfare and HR</li> <li>• ...</li> </ul>	<p>= <i>role based structure</i></p> <ul style="list-style-type: none"> <li>• workers councils</li> <li>• board members</li> <li>• members of councils</li> <li>• safety experts</li> <li>• ...</li> </ul>
<b>Knowledge Server</b>	

Because these categories also perfectly match the basic strategies chosen by members of works councils when in need for help, i.e. knowledge and expertise, this basic architecture guarantees a close relation with the existing learning ecology of works councils and their individual members by mirroring the underlying pattern of knowledge acquisition.

## 2.2 A Knowledge Server for Members of Works Councils

Designing a premium or value added service for participants of seminars that is able to blend into the existing learning ecologies and enhance the quality of learning taking

place within the traditional settings was the initial task which led to the development of a "Knowledge Server".

For this, and that was the second basic idea, it should be possible to make use of the vast amount of contents that are produced anyway in the daily practices of an educational institute and which are often co-produced by the learners themselves. So far, valuable knowledge that had been created during consulting processes, for studies or publications or even during e-mail conversations with colleagues, experts or participants disappeared without further notice or let alone usage in pedagogical contexts. Securing and formatting these contents in a way that allowed them to be reused was the first, making them easily available to the participants the second aim of the construction of a Knowledge Server. In other words: microcontent rather than any kind of technology (hype) was at the heart of it.

Basically the design of the Knowledge Server was meant to mirror the full knowledge base of an individual member of a works council and support the personal knowledge management. Whereas this happens to take place in role based knowledge communities and domain based knowledge stocks, I will from here on only refer to the concept and the realization of the knowledge stocks and the use of microcontent within that particular context.

### **2.2.1 Microcontents**

The first list of possible formats for microcontents was generated on the basis both, the collection of preexisting stocks of knowledge that already existed as well as the known demand for relevant contents that was uttered by participants of seminars. In both categories we have user generated and edited content. The production of this content is either driven by experts and tutors or motivated by the participants of the regular courses.

a. Examples for expert driven content:

- basic texts / brief introductions
- relevant law textes + comments
- recent court rulings
- web based trainings (wbt)
- internal company agreements

- sample texts / letters etc.
  - online resources (links, WBTs, etc)
- b. Examples for user driven content:
- FAQs from a mailing list for course participants
  - Comments from a mailing list for course participants
  - commented statements by experts for a mailing list
  - internal company agreements
  - sample texts / letters etc.
  - online resources (links, WBTs, etc)

It should be pointed out that this list mirrors precisely the requests for additional material that were constantly brought to the attention of the trainers and staff during as well as in the follow up of seminars and courses by the participating members of works councils. This demand was now translated into a repository of well defined and narrow formats for different kinds of knowledge assets regarded as help- and useful in the support of the daily efforts in problem solving by works councils.

### **2.2.2 Technology**

The formatted contents are implemented as learning objects editable and accessible via a personalized, login-protected web portal. A flexible rights management allows individualized packages of content and services to be defined and later to be assigned to each user or group of users individually. New types of learning objects can be defined and added to the repository at anytime, if necessary.

The internet based software platform specially built for this purpose, consists of a web server, an application server and a combination of customized applications. It provides various services that support and facilitate the use and search of contents as well as community activities. A personalized homepage which shows up once a user has logged in, displays latest items added to the subscribed packages and activities (posts, requests, polls, new members) within ones community. Optionally offering RSS feeds for this functionality, rather than e-mail alerts as it is being offered now, is listed among the desiderata that came up only recently and is planed to be realized in the near future. One mechanism to access the contents is a classical navigation, which allows the content a user has chosen to subscribe to be browsed according to a hierarchy in a partic-

ular domain of knowledge which is structured by containers (chapters) and contents (learning objects) assembled within a particular container. Each container is headed by a brief introduction to the relevance of the subject described by a container and followed by a list of contents assigned to it.

More importantly, there are various search mechanisms at the users' disposal which can be freely combined in accordance with the individual users research habits or the logical necessities of a particular domain. There is a google-style search at the center of the user interface which aims to adapt to the everyday use that is made of devices like (primarily) google. It offers an optional search request to be made in google if the results displayed do not satisfy the users search tasks – a feature that is meant to support the argument that the use of the Knowledge Server can become as ubiquitous as the use of google which comes along with it still. The global search of the Knowledge Server covers all contents available on the server (– including the community activities and resources!). Next to this there are complex search mechanisms like filters (allowing categories, indexes and free text to be freely combined in a search) which can be applied to defined domains and supports quick access to the most relevant contents of a particular query.

Beyond the technological solution described here, the relevant point to make is that this architecture and service design allows a flexible use, supporting search patterns and habits that have become routine for the users. Lowering the (technological) threshold and blending into preexisting routines turns out to be essential for a scenario like this to work properly and to be accepted by the users.

### 2.2.3 Information Architecture and Taxonomies

The design of an information architecture that allowed each object to be placed in a logical structure and to be related to taxonomy was of high importance within the concept. The solution that was finally implemented is based on two basic elements:

- *a hierarchical navigation* – this navigation follows the logical structure of the action oriented approach used in the trainings and seminars rather than the established ones used and known in jurisprudence. (Using tasks as structuring principle rather than subject related logic)

- *a thesaurus* based on expressions known to practitioners rather than lawyers and legal experts – used for indexing and retrieving microcontent. The same thesaurus is also used in seminars and textbooks of the residential courses. It stems from seminar work and is constantly pursued by new input

The fact that these two elements are unique and proprietary products of the institute is fundamental for the marketing of the service and its business model. More importantly it was opted for this solution because it gave the unique chance to link the seminar work with the learning activities taking place at the workplace (or elsewhere). The presumption was taken that this kind of action oriented, user centered design of information architecture and taxonomies would lead to better results compared to an orientation towards mere expert cultures.

#### 2.2.4 Pedagogy

One of the principles which was paid great attention to is that no product or service should be made available by the institute which does not meet the regular quality standards which are offered and expected by customers in the core business of seminars and trainings. Unfortunately many educational institutes have failed to put up and execute a similar policy when experimenting with technology based services and eLearning in particular – hence failure here should not have come as a surprise. As much as the Knowledge Server benefits from and capitalizes on the brand value of the trainings offered by DGB it can also ruin this very same value by offering minor quality. Hence all contents are edited and controlled by trainers and experts on the subjects. In case of contents from the domain of labour law a freelance lawyer is editing the content on a regular basis. All this contributes to the principle that the service is meant to be and to be perceived in no way as a substitute or second class service but as an integral part of the services offered to the target group. Consequently the same pedagogical principles are applied here as in the regular trainings and seminars.

The Knowledge Server is committed to the action oriented pedagogy that is used in trainings and seminars. Quality assurance is only one reason for that effectiveness and usability are equally important ones. It was assumed that knowledge is as much acquired and relearned as it is constructed “in situ”. By using a shared frame of reference in seminars visited in the training centers as in the support of learning at the workplace, users are enabled (and forced) to connect what they are working on with the

basic and often decontextualized knowledge and competencies they have learned in the seminars. As a result this does not only enhance the quality of the actual learning with and using of the Knowledge Server and its microcontents in their daily work but at the same time raises the quality and effectiveness of the visited seminars and trainings (an effect which was reported several times during first evaluation meetings).

So far the users are encouraged to make use of the Knowledge Server in two different scenarios:

1. using small time-spaces for knowledge acquisition and continuous learning efforts (just-when-time / learning on opportunity)
2. acquiring knowledge in action and for solving current problems (just-in-time / learning on demand)

Both scenarios seem to be equally accepted and appreciated by the subscribers and used without exclusive preferences for one or the other.

### **2.2.5 Implementation**

Individual access to the service called "Knowledge Server" is offered as a premium or value added service. Basically this gives the opportunity to offer it as a free extra for clients of seminars or as a service that is charged with a subscription fee. At the moment a mixtures of both is the preferred model where participants are offered a voucher for a 6 month subscription free of charge which can then be turned into a regular subscription with a semi-annual fee of 90 EUR or a renewed period of free of charge in case another seminar is visited within these 6 month. In any case each subscription allows an individual choice between a number of predefined, electable packages of contents and services to be made by the subscriber.

The business model defined for the service is based on the fact that quick and easy access to critical knowledge when and where needed is rated a prime demand by members of works councils. Hence the benefit of a subscription is convincing and most obvious to them. Given that other web based services offering access to relevant contents for members of works councils or experts in the different domains of knowledge the service described here can benefit from USPs such as its unique and proprietary pedagogical format, the strong brand value that comes along with it, a network of contributing experts and practioners.

The marketing of this service is relying on the existing marketing channels for seminars in so far as it is offered as a piggyback service but even more on the actual seminars

themselves where the service is being promoted as an integral part of the seminar work that is done. The pricing model marketed in analogy to the subscription of a professional journal and as such it is acceptable to the subscribers and also rediscountable via the regular procedure of the running cost of a works council being paid for by the company according to §40 BetrVG (ger. labour law).

### 3. Evaluating the Use of Microcontent in Trade Union Education

The Knowledge Server with its various stocks of microcontents from different domains of knowledge is now implemented and offered as a regular service within the portfolio of DGB Bildungswerk. Beyond simple usability tests and evaluation of particular services we are now interested to learn more about the best possible design of a learning environment and the most effective scenarios for the service to be used in. Although the evaluation process is far from being finished, in the current state some interesting findings can already be highlighted and will help to focus our attention on particular research issues.

#### 3.1 Key Findings of a First Internal Evaluation

At present the knowledge server assembles about 1500 learning objects of 12 different types. The stock is growing at a rate of 5 to 20 objects per week. In this starting phase, with limited promotion, it has to deal with some 500 subscribers since the beginning of the year (= 15 % of the annual figure of participants in this field), growing at a rate of 10–30 per week at the moment. Within less than two years time we expect to break even with regard to the costs of running and maintaining the service.

Based on feedback, collected from participants as well as trainers, the conclusion may be justified that earlier assumptions, who made us believe that eLearning was needed and appreciated by the participants of courses by DGB Bildungswerk, were in fact true<sup>4</sup>. Only that it must be taken into consideration that they were clearly attracted by the use of technology based services for learning at the workplace or in action rather than whatever forms of electronically aided distance education.

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4 In 2001 a representative survey executed by the PSEPHOS institute showed that 84 % of the participants of courses held at the DGB Bildungswerk either definitely or possibly wanted to use eLearning if it would be offered to them. Only 16 % rejected it then. Unfortunately, as it turned out, in reality all did – in terms of “eLearning 1.0”.

With some of the findings one is now able to partially complete the picture that emerges from this sudden shift in acceptance of technology enhanced learning services. The key learnings for trainers and management at DGB Bildungswerk are:

1. Acceptance as well as demand is high. The subscribers are not only IT experts or tech heads. Meanwhile, access to IT and networks (internet) can be regarded as *ubiquitous* within the target group. Compared to other trades and professions, IT skills are *not* significantly underdeveloped among members of works councils. On the contrary, the use of technology has fundamentally shaped and changed their learning behavior and expectations towards education.
2. Sustainability is not an issue anymore. The continuous use of the service has developed far better than expected. The rates of usage per user show a regular revisit by most and are far from showing the typical one-off pattern. Beyond that the use of the web based service seems to add to the sustainability of the residential course by engaging the participants in further learning activities.
3. Quality in content and pedagogy is a strong competitive advantage and knock-out criteria for users. The fact that the microcontents are checked and edited by a legal expert (lawyer) as much as the trust in the institution and its pedagogical concept motivates users to subscribe to the service rather than free of cost services that are also available.
4. Effectiveness and efficiency count high among the evaluation criteria of the users. Most complaints about other services focus on that issue.

### **3.2 Comparing First Evaluation Results with External Research**

Several indicators and studies show that the numbers for visits of seminars and courses are decreasing continuously over the last years. For trade union education this adds to an even more dramatic decline in membership and trade union oriented workers. Another negative trend is that members of works councils have become more restrictive with their time budgets affecting notably their willingness to take several days off to visit seminars.

So far the reaction from the world of trade union education has been to shut down services and close training centers – all over Europe. In that perspective technology based services are often perceived and sometimes utterly meant to be a substitute for resources that are not affordable anymore. The service described in this paper and the

results of our evaluation so far indicate that this perspective is neither compelling nor without an alternative. First of all, technology based services can and should be offered as a complementary offer rather than a replacement of existing services. Secondly we are able to show by our example that it can successfully contribute to *widen* the scope of trade union education rather than to minimize or substitute it. Trade union education has to be organized *differently* as an answer to the changes in the world of labour – not to be downsized continuously. In that, technology based services do and can play a leading role as a benchmark study of the British TUC<sup>5</sup> concludes from our and other examples.

So does a study which was commissioned by the Federal Institute for Vocational Training (BIBB) examining the use of knowledge communities for learning at the workplace. It presented the thesis that technological support of informal and self organized learning, to be most effective, needs to be *coupled* with formal learning, courses in particular<sup>6</sup>. The nature of that connection, however, has to be one of a *loose coupling* in order to achieve this. In successful examples of communities that were meant to support informal learning at the workplace and which were build as well as offered by educational departments or institutes (DGB Bildungswerk, IBM Germany and VW Coaching) they found that these services were as much the creation of a new kind of learning space to support informal, self-organized learning as they were a valuable supplement to the existing structures (courses and trainings) , contributing to the enhancement of their quality and effectiveness. One of the reasons they name is that this mode of technologically supported informal learning can do and add something to the development of expertise and competencies which traditional classroom learning does not: it motivates further learning, leads to deeper understanding of learned subjects and can immediately be used in action.

Both results contribute to my thesis that a. informal learning can (and should be) supported by educational institutes and b. that this endeavor does not necessarily lead into irresolvable problems or logical contradictions but can be managed successfully *by structural links* between formal and informal learning processes. For this, our case and its design can serve as a convincing proof.

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5 Creanor / Walker (2005)

6 Core Business Development, Studie zur Einführung und Nutzung von Online Communities zum Lernen in der Aus- und Weiterbildung von Organisationen, Bonn 2005, p. 93.

### 3.3 Open Research Questions

So far it can only be said that the solution of widening the learning space and linking formal with informal learning processes leads to a rise in the *perceived* quality of our services. For this case, there is no data available showing in any way an objective and detailed measurement of precisely which qualities had been raised and how.

We now would like to know better how learning with microcontents and the “pipe” they are delivered through are integrated in the daily practices and routines at the workplace of the subscribers, especially how they make use of the knowledge acquired or constructed from microcontents. Last but not least we would like to understand better which role the use of technology or different media play in the way they learn in such an extended learning environment.

In preparation for that we found that whereas there is plenty of valid information on *what* members of works councils learn, hardly any research or literature exists that is focusing on *how* and *when* they learn. An exploratory study that we jointly commissioned together with the Hans-Böckler-Stiftung came to the same result.

Consequently some of the aspects that must be examined in an evaluation study are:

- when does learning occur in their daily practices, what initiates learning activities
- how is the knowledge server integrated in their learning behavior
- how do they make use of the two basic scenarios (just-when-time and just-in-time learning) and why
- are there other scenarios invented or preferred by users

Finding new insights here may bring some light into the discussion on how learning takes place within the work of works councils.

### 3.4 Methodological Challenges

A structural description of the learning ecology of works councils, based on a secondary analysis of existing data was the founding stone of the concept presented in this paper. Starting like that contributed to the process of challenging or correcting the stable constructions and biased judgments of the pedagogical staff with regard to the needs and demands of their participants. All in all it has turned out be a wise and fruitful step to do. Nevertheless it is a limited and rather shallow first approach.

To find evidence whether and to what extent the Knowledge Server succeeded in connecting to and blending into the preexisting learning ecologies or in other words merge pedagogical concepts with individual learning habits and strategies of our participants we need to take a much closer and detailed look into the processes and perceptions that develop when learning occurs in the “natural habitat” of the individual learner.

Hence research should be done examining learning in its authentic settings and contexts. We are convinced that a case study based on a qualitative approach will be able not only to answer our immediate questions on how learning with microcontents looks like but will also contribute to the further refinement of the pedagogical design of this and other services. Ethno- and biographical research is needed that takes into account the learning histories and a specific background of members of works councils.

In that we are not seeking for an illustration of learning theories of any kind but a theoretically sound understanding of how our service meets the learning habits of our subscribers / participants as well as an unbiased view of their actual needs and demands when preparing themselves for the tasks they have to fulfill as members of works councils.

#### **4. Conclusion**

We started with the observation that there is a growing gap between management training and trade union education and the notion that, to be most effective, the training of members of works council should be regarded as much the training of knowledge workers as it is the case with management staff. Based on this thesis, the basic idea was to widen the classroom setting and extend the learning space created by us as an educational institute. This led to the design of a service which was designed based on the structures of the existing learning ecology of works councils and meant to support the personal knowledge management of members of works councils. It is meant to connect to the networks of their learning ecology as much as support the learning processes taking place within these networks. The way in which the service had been implemented might be seen as a model describing a viable path of linking informal, occasional learning with formal settings like trainings, courses and seminars. Structural links between the curricula of these classroom based services and the archi-

ecture and taxonomies of technology based services help enhancing the quality of both modes of learning without destroying their original and irreplaceable qualities. First evaluation results show that this fundamental thesis might be valid and the service built contributes with positive effects to the aim of organizing the knowledge work of workers representatives in companies more effectively.

Developing these coherences further leads us to the point where we in fact might think of trade unions as learning organizations<sup>7</sup> in the sense that the methods and tools described in the discourse / theory of organizational learning might be applicable to them with great benefits. The same is true for working structures like works councils. Its members can be regarded as knowledge workers and should consequently be treated and supported as such. Finally we may conclude that 'knowledge work' is not something which is only done by a managerial elite and business consultants as common sense and some researchers<sup>8</sup> wrongly suggest but a perspective which can (and should) be applied to any form of professional work. Further research is meant to lead to a valid proof of that theoretical thesis.

If this is true, technologically supported "business intelligence" as it is common in management of many companies might one day be confronted by an equivalent like "labour intelligence". The use of microcontent provided online to support and enhance the training of members of works councils is one milestone of creating exactly that.

## 5. References

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