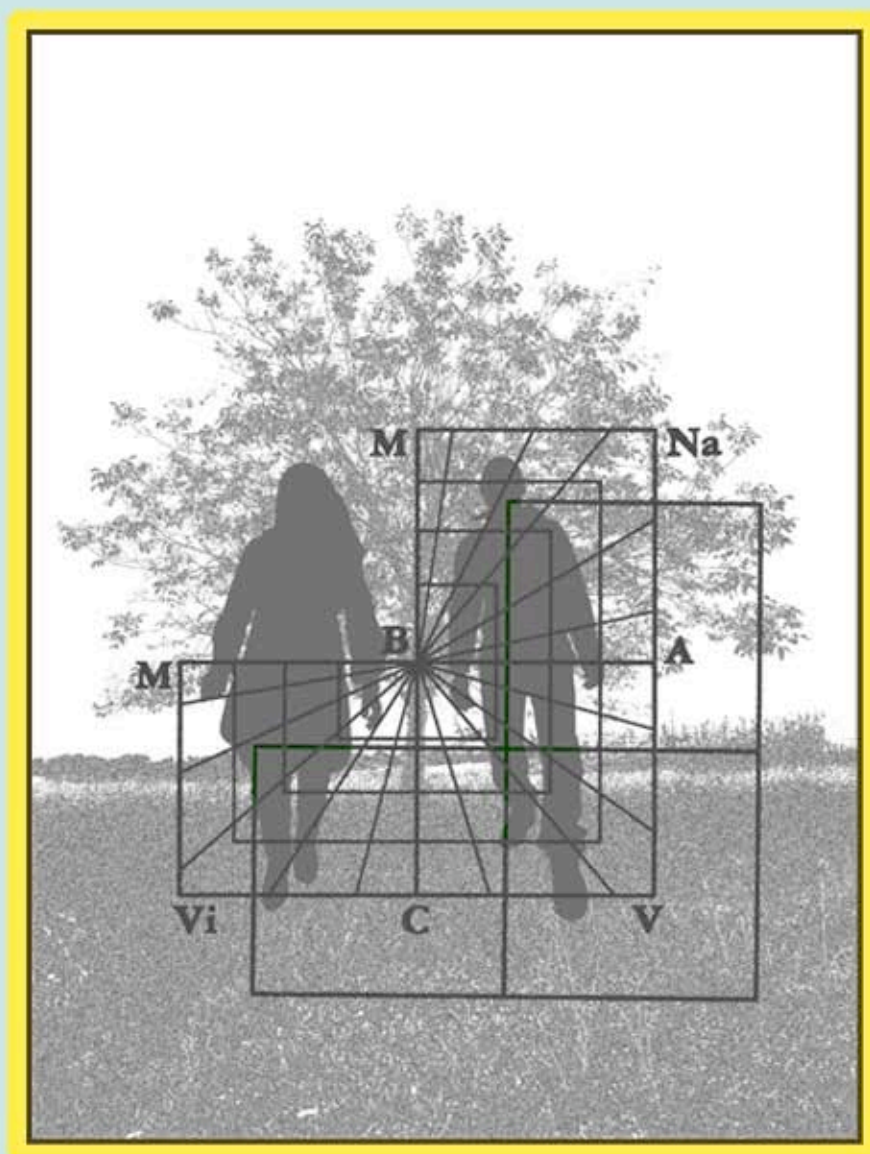


# Germany - Comparative Report

Discussion paper 2012/7.7.

Fikret Öz & Ileana Hamburg







Tertiary Higher Education for People in Mid-life (THEMP)

## **Germany - Comparative Report**

### **Discussion paper 2013/7.7**

**Fikret öz and Ileana Hamburg**  
**Institute for Work and Technology**

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# 1 Introduction

Main challenges of the ageing knowledge economy are constant upgrading of the skills of the active population and mitigating new and old social risks. In the aging society and the globalised knowledge economy, the people in mid-life are increasingly exposed to social risks of exclusion from the labour market. They are also excluded from formal Lifelong Learning (LLL), specifically Tertiary Lifelong Learning (TLL). The access of mid-life learners to TLL and their retention in the system have an increasing relevance for the socio-economic sustainability of the ageing European knowledge society.

Opening Higher Education (HE) for mid-life learners, designing flexible pathways from VET and professional experience to higher education, flexible learning arrangements conciliating family-work life and learning and the adaptation of didactical methods in HE are challenges to affront problems of the aging knowledge society.

The European Project THEMP (Tertiary Education for People in Midlife) focuses on the education and training mission of the Universities and asks for the measures taken by the universities to expand their educational and training activities beyond the traditional students to a wider range of citizens and in wider range of learning environments.

The project aims to study tertiary life learning (TLL) programs at universities in 7 EU-member states (Germany, Italy, Spain, Hungary, United Kingdom, Czech Republic, Netherland) with respect to inclusion of mid-life learners and social impact. It provides a description of the landscapes of tertiary life long learning in these countries, but the core contributions are case studies of three universities in each country. Main focus lies in the analysis of the weak and strong points of the lifelong learning activities in the selected universities and their strategies in developing and implementing training programs.

In Germany, three HE-Institutions have been chosen for case studies: Ruhr-University Bochum, Fern-University Hagen and University Duisburg-Essen. At the core of each case study stands an analysis with statistically available data, making series of interviews with decision makers, takeholders, lecturers and mid-life learners. In this report the results of the case studies in Germany will be presented. The national report will summarise general findings of three case studies and, hereby, show an overview and some insights of the general TLL-activities in Higher Education Institutions in Germany.



## **2. LLL and TLL in national context**

In the German education system, the states (16 Länder) have the main responsibility, while the Federal Government plays only a minor role. The Federal Government is mainly responsible for legislation on the general principles of higher education, promotion of research, financial assistance for the students, vocational counselling and vocational on-the-job training in the dual system. Several major issues in the education system are still addressed at the national level, which leads in practice to several interest conflicts among states and to more or less different regulations and procedures in the states.

380 higher education institutions are spread across the entire country. Today, about two million young people study in Germany. Different types of public and private state-recognized institutions of higher education have co-existence in the German education system.

The universities of applied sciences (Fachhochschulen) are a special feature of the German university system. Distinctive features of those universities are their emphasis on practical relevance, their small group size and exams which are integrated into the studies, as well as study programs which are highly structured, planned, job-related, which therefore result in much shorter study times than is usual when compared with other German universities. The universities of applied sciences offer application-oriented study courses mainly in Engineering, Economics, Social Work, Public and Legal Administration and Health and Therapy. The graduates with excellent grades may well be admitted for a PhD at a university.

The German Education System has some peculiarities which prevent to a certain degree the spreading of LLL-issues. Basically, lifelong learning activities of the HE-Institutions can be summarized into two major topics: Continuing vocational training and Continuing education at institutions of higher education.

Beside teaching and research, HE institutions are also involved in continuing education activities. According to estimations there are 348 further training centres in the HE-Institutions in Germany. The programs vary with respect to duration, degree and addressed groups.

In Germany, there are 15.750 further training organisations. Half of them are private organisations (33 % commercial, 15 % non-profit), 14 % adult education centres (Volkshochschulen), Education institutions run by churches, unions, political foundations, adult education initiatives have in total 12%. Companies have a share of 12 % as well. Vocational training schools and vocational high schools have 10 % share. Other training providers are around 5%. They get their income from five major sources: Participants themselves, Companies, Labour Agencies, Official Sources (States, Federal State, EU, Local Government), and sponsor of the organization themselves. (BIBB 2011)

Although there were some initiatives during the 70ies to establish continuing education as a core part of public education system, the idea has disappeared in time, mainly due to competence wrangling between national state and Federal States. Federal States are in principle responsible for the education issues and their position has been strengthened further as a consequence of the reform of the federal system in 2006.

With respect to continuing education, the main responsibility is shifting more and more towards the individual learner. The terms “self-directed-learning” or “self-learning” have become common not only in policy discussions but also in professional and educational science discourses. Self-Responsibility regarding individual financial investment in education is expected.

Since 80s there had been initiatives to establish continuing education, besides teaching and research, as a third pillar at institutions of higher education. The terms “continuing vocational training” and “continuing education” are used mostly interchangeable, which makes any attempts to get an overview much more complicated. Meanwhile there are several organizational units within the higher education institutions which are engaged on a huge spectrum of training activities. Nevertheless, LLL has been regarded in general as a diffuse concept with an ambiguous content. Some existing activities are offered under the new label LLL but without any further value added.

The early initiatives and acts have aimed at expanding knowledge transfer outside of HE-Institutions. The aims were directed, on the one hand, to lessen the burden of first level education and to meet the qualification needs of the economy. On the other hand, as an instrument for additional resources in the HE-Institutions.

Today, several HE-Institutions have established further training centres and offer courses and seminars with various length and content. Furthermore, new organization forms have been established in order to ensure flexibility in the training market as well as to develop target group specific offers. Corporate universities and increasing engagement of international universities are, hereby, new development in recent years.

The main of further education courses are not directed to the necessity to transfer academic knowledge. But to disseminate in the market and address various target groups. In the last years, the offers for continuing education have become more pragmatic and occupation oriented.

Nevertheless, LLL is still in the beginning stage in the German HE-Institutions. Main reasons are related to:

- Training and training related activities are not a reputation factor among the scientific community at all.
- At the training market there is already a strong competition. Academicians are not businessman, mostly lacking business spirit
- Reluctance of academicians and institutional barriers which prevent flexible and quick responses on the changing market conditions.
- Still problematic issues: transparency of programs, modularization, certification and accreditation of academic continuing education.
- The costs of further training activities at the universities should be self-covered. They get usually no financial contribution from the state, compared to first level Higher Education. Furthermore, time burden for such activities are not registered as working time, which leads to low engagement of university staff due to time reasons.

Higher education institutions, therefore, play only a minor role in the continuous training market, although in the recent years the share of distance learning has been increased within the HE system. Higher education institutions are estimated to account currently for about five percent of the continuing education market.

In 2004 the Strategy for Lifelong Learning in the Federal Republic of Germany was formulated with the aim of promoting LLL activities among different age groups in Germany with a special attention to those who have low qualifications. According to the strategy financial incentives have been created to support people with low income in participating in further education and training. In addition educational counselling and on-site learning activities at the local level have been improved.

In order to achieve the strategic goals, several attempts have been made in order to open universities for people with vocational training and experience. Recognising prior learning experiences is the competency of the federal states, since there is no unified education system in Germany. In order to ensure mature students' participation in tertiary lifelong learning activities, a central question is recognition of their prior learning experiences. Although the legislation allows explicitly the recognition of prior experiences, the share of adult learners in non-traditional training courses offered by German universities is still very low.

Several initiatives have been introduced in order to achieve this goal but federal level of the regulation of education has led to restricted results. Additionally, adult students often face difficulties in undertaking full-time study. Alternative modes of higher education programme (part-time studies, external/extramural studies, distance-learning etc.) are needed to widen participation among adult learners.

Globalization is also creating new challenges for the German scientific and university community. The policymakers and universities have taken initiatives with a series of reforms to adapt the university system to the new international standards: introduction of Bachelor's and Master's degrees or the introduction of tuition fees and selection tests, emergence of private facilities for academic training or the stronger strategic alliances between universities and institutes outside the higher education system. Nevertheless, that there is still a way ahead to go and the higher education institutions should be engaged in TLL much more than before.

### 3 Case Studies and Methodology

The national report is based mainly on the findings of three case studies. Ruhr-University-Bochum, Fern-University Hagen and University Duisburg-Essen have been chosen in Germany. Due to huge diversity of HE-institutions and institutional units dealing with Tertiary Life Long Learning (TLL), the selection of those three cases can only show illustratively some examples of TLL-activities in German HE-system. Although not representative at all, during the selection it has been striven for to identify typical institutional forms which could give insights about the general praxis in the German HE-System.

Ruhr-University-Bochum has long tradition in the fields of further training programs. Fern-University Hagen is the biggest distance university which offer flexible training and part-time study possibilities which are highly relevant working people and especially for persons in midlife age. In University Duisburg-Essen, further training activities for wide person groups are still in progress. But in the last years new programmes have been initiated.

In three cases, 18 interviews have been conducted in the time period between March and October 2012. The majority of the interviews have been face to face interviews. Some interviews have been carried out by phone. The interview protocol has been designed as semi-structured questionnaire in order to enable the interview partners to express their opinion and thoughts as much as possible.

At the core of each case study stood beside an analysis of statistically available data, documentary analysis, interviews with several actors. The questions in the frame work of the interviews have addressed mainly at two levels. At the institutional level, institutional representatives, decision makers, stakeholders and lecturers within the HE-institution or a specific program have been chosen for interviews. At the individual level, however, main interest has been directed to the students who have been currently participating in the TLL-activities in question or who had been participated in the recent past.

The main selection criterion of the TLL- Programmes has been their relevance to the main target population of the midlife-learners. Nevertheless, the analysis of the TLL-Activities in Germany have shown that in general only a few programs have been directly addressed to midlife learners. In several programs, one would find, however, a mix of certain age groups. Hence, midlife learners do not build the specific target group in TLL-Programmes in the case studies.

The **general research interest** within the THEMP case studies can be summarized as below:

- Why, how and to what extent HE-Institutions are involved in the TLL-activities?
- What were the driving factors in the **decision-making** process? What is the main target group for such activities?
- Which **didactical** approaches are needed or already applied,
- If and how such programmes are designed and tailored to the special needs of the learners in **middle-life**
- What was the **impact/Effect**?
- Is there any evaluation procedures and how they are applied?
- Which experience has been made and what are the challenges, recommendations and expectations in the future?

# Case Study 1: Ruhr University Bochum

## General Information about the Institution

The Ruhr University Bochum (RUB) was founded in 1961. With its 20 faculties on one integrated campus, the university is home to 5,000 employees and more than 36,500 students from 130 countries.

Research and teaching is carried out in a total of twenty faculties at the RUB. The term "Faculty" is used for RUB's disciplinary institutional units. The holder of the chair, i.e. a professor, leads a team of academic staff, administrative staff, technical staff and student assistants. In some cases, thematically related chairs are organised together in institutes and departments.

The Ruhr University currently offers some further education courses that can be studied as distance learning and part-time or further studies. As a rule, these are to postgraduate Master's courses. These are usually charged.

As distance education two advanced Master programs are offered:

- Distance Learning Program "Applied IT Security" (Master of Science),
- Distance Learning Program "Criminology and Police Science"

Advanced Master programs can be attended as part-time for a university degree. In general, the programs are divided into three-day (weekend) courses that take place in one or two months' distance over the study period (one to two years). Between these seminars there are self-learning phases for their preparation and review. These phases are individually configurable and can be adapted to timing constraints.

The continuing education facilities provide tailor-made courses for companies and their employees, teachers and RUB members. Such programs can be attended parttime.

On the Ruhr University campus, the Ruhr University Academy, which is organised by private business, realises all-encompassing, interdisciplinary educational measures. It provides academic-standard, job-oriented continuing education for specialists and management in companies, local authorities, organisations and educational facilities. The close cooperation with teaching and research at the Ruhr University creates ideal conditions for positioning in the continuing education market with distinctive programmes.

The Centre for University Continuing Education ("Arbeitsstelle Wissenschaftliche Weiterbildung", AWW) provides information about the range of continuing education measures provided by the RUB and advice on questions of job-oriented further university education. It also advises and supports the faculties (the term "Faculty" is used for RUB's disciplinary institutional units) and institutes in the planning and execution of continuing education programs. This takes place in close cooperation with the RUB Academy.

The Professional School of Education (PSE) advises teachers and gives them information about the possibilities of continuing education and training at the faculties (the term "Faculty" is used for RUB's disciplinary institutional units) and external institutions.

Although principle of lifelong learning is formulated in the guidelines of the University, there is, however, no general strategy for its implementation. Regarding continuing education and training (Weiterbildung), however, there is a broad spectrum of activities organized and coordinated in different units.

**Whereas Centre of University Continuing Education** provides general information about training activities at the University and advises and supports the faculties and **Professional School of Education** advises teachers and supports research-based teacher training, Main unit for the organization and coordination of training activities is the **Ruhr University Academy**.

**Ruhr University Academy** is organized privately and provides academic-standard, job-oriented continuing education for specialists and management in companies, local authorities, organisations and educational facilities on an academic level.

The topics are:

- Digital Geographic Information Processing
- Human Resource Management
- Innovation through participation
- Conflict Management and System Design
- Lean Management
- Mediation and Conflict Management
- Organization-oriented key qualification
- Systemic consulting in business and the world of work
- Change Management

Additionally, the academy offers seminars to various topics. The duration of such seminary varies from one day to several weeks. Each year around 200 persons take part in training activities. In the empirical framework of THEMP, the topic “Change Management” has been chosen as case study in cooperation with the Ruhr University Academy, mainly due to its relevance to middle age groups as well as to the high share of elderly participants in the courses.

“**Change Management**” is a 3-semester extra-occupational program for people with work experience as employee’s representatives and members of work councils, offered by the **Ruhr University Academy**, in cooperation with m5 Consulting, a consulting agency specialized in work councils.

The program encompasses six modules. Each module is designed for one week (Monday to Friday) and two modules per semester, which have to be attended in Bochum. This duration was chosen in order to establish a profound education environment and to reach participants. In the time between the learning modules, the participants have to solve certain tasks which can be done either individually or in groups (corresponding personally or via E-mail and telephone conferences).

Modules:

- self-management
- conflict Management
- project Management
- Economics
- Management  
change Management

The participants are encouraged to work together with experienced colleagues about strategies and solutions to specific challenges of their own professional practice. Within the framework of so called fireside chats, they would get the opportunity for an intensive exchange with experts who are invited occasionally for such meetings.

After successful completion of a final paper on their project work, the participants receive two certificates – one from the **Ruhr University Academy** and one certificate from the IHK (Chamber of Industry and Commerce) entitled “Change Management”.

### **Target Group**

The program is oriented to people who work in positions as employee’s representatives, especially members of work councils (in some cases also members of the staff council) of enterprises. The admission to the program presupposes priorly a professional education and work experience in employee representation.

- works and personnel council leading members
- employee representative /in the management board
- workers' representatives /with special responsibility
- member works councils

Participants come from all over Germany, the average number of students within a seminar is approximately 20. The age structure is (roughly) as follows: 50% are between 40 and 50 years old, 25% over 50 years and 25% under 40 years.

The reason for the initiation of such a program was based on the recognition of changing demands with respect to working environment of the target group. It has been developed in cooperation with the members of work councils. Work council members are elected by the company workforce for a four year term. They are expected to reduce workplace conflicts by improving and systematizing communication channels. Depending on the size of the company, they are released from their duties and spend their time in representative issues. During work council work, they gain certain knowledge and acquire several skills and competences (e.g. advancement in social competences, personal management, juristical knowledge) which have normally nothing in common with their previous position and occupation.

The program “Change Management” is an offer based on a systematic further training to endow themselves with necessary tools for improving their daily work in the work councils. In general, most of them are unlikely to return to their previously position after working in the council. Mostly they take over other responsibilities within the company (or elsewhere, if desired). Therefore, the program aims at supporting them for time after work council activities.

### **Decision Making**

The Ruhr University has over 30 year experience in the field of developing and implementing continuous learning programs. However, a systematic and institutionalised conduct has been possible through start up of Ruhr-Academy. The aim of such activities are related to the exploitation of internal resources and opportunities. Not only teaching and research but also

training activities for non academicians should have been promoted. Hence, with respect to continuous learning the university was one of the early starters in Germany.

Regarding selection of issues there is no fixed form of thematic orientation. In general, certain content areas for explicitly selected target groups are chosen. Main questions for program development focuses on such questions: Where is demand and has the university interest in it. Since the academy has a privat market orientation, i.e, all the costs must be covered. Compared with the teaching activities for undergraduates and master studies, such further training activities of the academy becomes no external financial contribution from the state. All of the lectures and decision makers surveyed in the case study stress this as a major obstacle for the extention and development of training programs for external visitors.

The Ruhr University Academy develops programs usually in cooperation with the faculty members and within the academy itself. From time to time it works intensively with the external instituions and cooperations. The training program "Change Management" was an output such an external cooperation with the MP5-Consulting firm, which develops and offers specific training programs. The interviewed members of the MP5 claimed that an academic training program for work council members had been the first one 10 years ago as such.

Since then one can find meanwhile several new programs for this specific target group. The basic idea for an initiation such a program emerged from diverse contacts with the trade unions and work council members. The MP5 had conducted an empirical research and surveyed several work councils. Eventually, the major problems of the work council members became apparent. The work council members are elected for several years and are set free from their occupational duties. They have to concentrate on representative issues and overtake several diverse managerial tasks. The question is what happens if these members are not relected or don't want to stand as candidate for next election periods. Both employees and employers would be confronted with a severe problem. During their job as work council member they have distanced from their original occupation and experienced decay of qualification. Even, if return to their own occupation, they have fear that they can not keep up with new requirements and qualifications. As work council members, however, they have acquired new skills, especially in the fields of management, organisational development and representative issues.

The employers have also difficulties to settle them down in old departments, even if they still exist. The MP5 has grasped the idea and developed first thoughts for an academic training program and took contact with the Ruhr University Academy.

The program is promoted by means of brochures, its homepage and mailing lists, but also on fairs or directly within companies, when program representatives are invited for presentations. Many participants take notice of the program by information of their colleagues or employees of other companies. They decided for the program because of the positive experiences of former participants.

The number of participants is on avarage 18-24. After the threshold of 15 participants the program can be started, which constitutes cost-coverage. The Change Management program lasts 3 semesters and requires 30 presence days. So the participants require permission of the employers. The interview partners claim that work council members insisted on one day a week presence or at most two days a week. But the Academy has regarded this due to didactical consideration not that much feasible.

The interviewed students see themselves confronted with huge changes in the labour market. Some of them are in charge of work council task since several years even decades. That such a training program will be offered by an academic institution, attract their attention. The fact



that the participants had probably in their life time never a contact with an academic institution was the major obstacle to overcome. The Academy offered overview seminars. Mostly, they are informed by former participants or own network with trade unions and other institutions. The thoughts about the time coming beyond work council period lead them to a new orientation. The fact that they can not go back to their original occupation, motivates them to do something new or even in the old company they can overtake eventually managerial tasks. Mainly, due to their experiences in such issues during the work council membership. They have built up some social and soft skills, and even some substantive skills regarding management, legal issues and specific aspects of human resources.

The members of the work councils set free from usual work burden. According to Labour Management Relations Act or Personal Representation Act, the employer is also obliged to take measures for training activities for council member and finance them as well. Hence, the costs for the training program are taken over mostly by the employers. Additional costs due to presence days in the academy makes for nearly all participants a great struggle to get a permission. Major objections come from other work colleagues in the work council. Since they must overtake additional work due to absence days of participants. From time to time it is also reported that some colleagues show jealous reactions. Most of the participants live in the surrounding cities with reasonable travel time lost.

Apart from possible financial difficulties, students claim that they have to convince not only their respective work council, but also their private surroundings and their family members. Most of them have various responsibilities so they have to be very motivated.

Furthermore, beside finances and timing, potential as well as actual participants might have doubts regarding their own potential for an academic education, as most of them do not have an academic background.

## **Implementation**

Main challenge of the program design constitutes the adjustment to be made with respect to specific target group:

- The participants have usually no academic background and even never had a contact with academic institutions before.
- They have, nevertheless, long years of occupations practice and experience. They even know labour market better than some university professors who are engaged in solely with research and academic teaching. The programs designed should pay attention to past experiences of the participants and, if possible, incorporate it into the design of the programs.
- The participants belong to midlife age groups and should not be treated like undergraduate students. Their learning pace and time differ to a great extent.
- Didactical aspects are related to the challenges how previous experience and specific target group peculiarities should be balanced in accordance with the program targets.

Furthermore, due to their long term experiences during the work council membership, they have built up some social and soft skills, and even some substantive skills regarding management, legal issues and specific aspects of human resources. The program “Change Management” is designed to take such aspects into account and build on such experience and to offer systematic training.

The program “Change Management” take into account real demands of participants and integrate the treatment of them into the seminar program. In the module “Self-managent/Self-Organisation” such specific needs are articulated and a basic idea of a project work will be developed which is a prerequisite for a certificate at the end of the program.

Participants work on the individual project along the entire training program and at the end it will be finalised in a form a report, which constitutes their final output, for which they get a certificate. The certificate will be designed in cooperation with the IHK (chamber of commerce) and enjoys a high level reputation. Mostly, the content of the projects are related to specific plans or targets of the participants what they want to do after the duration of council membership.

The conduct of projects are regarded as a key measure to bring the theoretical aspects with the personal experience together. Each practical project is assisted from planning, execution, documentation to final presentation. The management team calls this as selective content mediation where mediation theory is converted into a practice-oriented project. The tools which are thought in lectures are then applied in practice.

During the lectures, the participants are encouraged to be active in discussions and asking questions. The participants learn by this way also from the experiences of others.

Another way to bring the participants together and enhance networking is related to the organisation of Fireside guests meetings. Occationally, some people from industry or universities or from politics are invited to such meetings where participants and quests delve into thematic discussions, where everybody would profit from experiences from others. Some guests are proposed from the participants. This is another way of dissemination by which the participants link the learning content of the course with their own campany and, hence, with the practice.

The lecturers should not sound that much academic where they use too much academic vocabulary and terms. They must be able to transmit academic finding through an understandable language. They must be able to show practical content and adapt it to the target group. Not every scientist or professors can do that.

The employers and participants have certain confidence to the Academy mainly because of its academic institutional setting.

### **Didactical Aspects**

Concerning the didactic approach of the program, the focus is on linking the theoretical background knowledge which is provided in academic lectures and seminars with the practical implementation of the newly gained skills. Participants are encouraged to actively contribute to the content of the program by proposing guest-lecturers from their individual work background for so-called “chimney evenings or fireside-meetings” with open discussions. Six-months practical project has to be finished by participants during the second half of the program in order to receive a certificate. In this project, the students (in small groups up to 4) chose a practical topic from their professional background and apply their newly gained theoretical knowledge to this task. The results can also potentially be applied in the respective companies the participants work in.

The starting modul “Self-Manager” is designed to transmit some study skills and to encourage the participants to an activ way of seminar. Firstly, the participants should lose the fear from a new enviroment which is settled in an academic world, which may seen overwhelming. The participants bring certain experience. Based on it, the seminar tries to

deliver a substantive input, shows new methods and procedures, upon which they can build up and finally to channelize this into the progress of their project. Individual needs or interests are acknowledged and supported for the formulation and realisation of the project. The modules are mandatory for all participants.

The lecturing team consists of university professors from the faculty of psychology (business psychology) of the Ruhr University Bochum. External lecturers, trainers, professionals or professors with an economic background (macro-economics, human resource management, business mediation) are engaged as well. In the selection of their staff, the program managers put particular emphasis on experience in adult education (resp. with people who have professional experience, as opposed to graduate students). Some topics are covered by written documents. They are designed to assist and instruct the participants in the time period between seminar meetings. They are usually in electronic format and are offered to participants by using learning platform of the university, which is called "Blackboard". Possibilities of new media and powerpoint presentations of flip charts are often used. But what is more important, as the interview partners claimed, is the variety in the types of the work: lectures, discussion groups, exercises.

The lecturers should have in general experience with respect to adult learners. They should not only know the specific issues of teaching and learning but also should be as lecturers active outside of the university. They are coming from different disciplines. The major aim is to combine and integrate their experience in the framework of the seminar. The university has a special department "Internal Training and Consulting" supporting training competencies of the staff. Didactical training for lectures are offered.

In general, students appreciate the training and teaching methods within the program. But they are overwhelmed in the beginning by the huge amount of things which they had to organise by themselves. But through self-management modules and by interaction within the group in the seminar, they can exchange ideas with another and get involved deeply with the seminar topics. Due to lack of learning experience in an academic institution, the participants had great reservations with respect to learning and teaching methods. Some of them think that the students must have certain abstraction abilities to keep up with the subject. The students being interviewed claim that such fears disappear in the course of time, mainly due to support and assistance of the lecturers. As a whole, lecturers meet expectations of the students. The lecturers are coming from university and other similar institutions and this has been regarded by students as a positive combination.

## **Evaluation and Impact**

Constant evaluations in every single teaching unit of the program are an essential part of the conceptual framework. Students fill in evaluation forms after courses. They deliver ratings with respect to individual aspects of a lecture or seminar. They are asked to assess via open questions the quality of the program units. The participants are encouraged to propose changes, if deemed necessary. Critical issues mentioned in these evaluations are usually adopted as soon as possible – this applies, however, for smaller or organizational changes. In case that a majority of students is very dissatisfied with a certain lecturer, the lecturer might eventually be replaced.

Feedback from and regular contact with several Alumni-students encourages the program management in their impression that many of the skills acquired during the program could actually be applied within the professional surroundings of former participants. Some of them

have reached higher positions within their companies, while for others a desired change of employer was possible.

The interview partners from the management side regards the program “Change Management” as success. There were meanwhile some other competing offers from diverse institutions in the training market. They have disappeared now, but “Change Management” is still offered on the market. Evaluations and alumny network can deliver indeed some insight about the impacts of the programs. But what is needed, so one lecturer, is somehow long term program evaluations starting from the beginning of the program and escording and finally analysing the real effects on the participants.

The students appreciate and stress the high importance of practical relevance of the topics in the seminar. They have profited especially from self-management and conflic management issues and could apply in their own work, company and even in their daily life. Some participants had several trainings in the past, mostly offered by trade unions. They might have been usefull in the beginning, but over time they become boring. In an academical setting, so in opinion of one participant, they could learn something usefull and embedded in a theoretical framework.

They regard further training in general as a good possibility to do something meaningfull in old ages and to have new orientation and to improve employment chances. Due to the fact that some participants come from other cities and from diffent companies, team building in project groups had been difficults. Participants from same cities and companies stayed together and build up groups for project work. Others found it difficult to get access. Teleconferences and communication via internet are usefull possibilities but not real substitute for personal interaction. Since some participants come from diverse cities, it can be expected that such groupings would be somehow problematic for some participants in future.

## **General Conclusions**

Principally, the adult education programs differ from typical university courses. In general, in the University studies job experiences are not required or asked for at all. If someone has occupational experience, this had seldom to do with the content of the current study. What the programs of the Academy differentiates from typical university programs is the fact that the needs of the participants are taken into account in each step of the program from developing and desing to the implementation. They are designed to a certain degree flexible in order to incorporate and adjust the content as well as didactical issues into the current level and needs of participants.

Development of such programs should, according to the views of lecturers and responsibilities in the Academy, concentrate both on the internal competencies of the universities and the needs in the market. It would not be enough, if the universities develop programs which are interesting but have no market relevance and no demand. On the other side, it would be ineffective if the demand actors ask for some ready-made tool box which they can apply immediatly on the work. There must be some balance between theory and practice. From this cooperation both sides would profit. Workers can learn how to reflect theoretical background in their daily work and scientists can observe relevanz of scientific knowledge and skills in the practice.

The program “Change Management” has been slihtly modified and adjusted over the years, but the core modules remained the same. In the opinion of the interview partners, such programs should have continuity and somehow a recognition effect as well as a label with a

good reputation on the training market. New participants learn usually from former students about such offers and the good reputation and certificate have huge effects.

Participants claim that Life Long Learning is becoming a major issue in the companies. In the past the companies did not encourage that much training activities. They have, at most, tolerated, as long as such programs do not cost time and money.

In general, development of further training programs by the universities is regarded by some lecturers as problematic. Which concerns the fact that many of university staff concentrate mainly on teaching and research. Many of them have no practical experience or job experience in companies. If a new orientation would be successful will be in future a real challenge with respect to the role of universities in the Life Long Learning strategy. Another obstacle is related to financial issues. German universities do not get financial assistance from the state and such training offers for wide public should cover costs. In opinion of lecturers interview in the Academy point out the importance of institutional settings and legal framework.

## Case Study 2: University Duisburg Essen

### General Information

With 410 professors, 2,300 academic staff, 1,270 employees and about 32,000 students, the University Duisburg-Essen (UDE) is one of the largest universities in Germany. It emerged in January 2003 from the merger of two universities: Gerhard-Mercator University in Duisburg and Essen University.

In the guidelines and general strategy papers, the concept of LLL does not appear. The objectives are described rather by terms such as training on a scientific level, practice and needs orientation, customer orientation, flexibility and future orientation.

Furthermore, the association "Life Long Learning Association" supports studying at age. The activities of the association, however, revolve more around the target group of older people, mostly retired persons.

Currently, the training activities are offered primarily by the Ruhr Campus Academy. The Academy was established in the legal form of a non-profit limited liability company. The main shareholders are each 50%: the University of Duisburg – Essen and the company of friends and supporters of the UDE. The Academy acts as an operational unit for training activities in general and delivers, furthermore, support and consulting for initiating new services with external providers.

Generally, it must be noted that the offers of the Academy have no specific focus on the target group of people in middle age. The participation of people in middle age is not excluded, but this target group plays a minor role in the developing and offering specific programs. 60% of students are younger than 26. The proportion of students who are older than 36 years is up to only 4.5%. Older than 45 years are considered as a whole 0.79%. This can be seen also as a gender gap: For men, the percentage value is 0.92%, for women only at 0.68%

As a case study in the framework of the THEMP-Project, the master study VAWi (Business Computer Science) has been chosen, mainly due to the e-learning or blended learning concept and possibilities of part-time studying and a shorter duration which would enable participations of older age groups.

VAWi is a joint project of the economics faculties of the University of Duisburg-Essen and the University of Bamberg and the Institute FIM (New Learning at the University of Erlangen-Nuremberg) and the German Institute for Standardization (DIN). It is offered since the winter semester 2001/2002.

The program is based on 100% e-learning study without attendance times. It offers to learn in modules with various specialization possibilities. Due to online learning, it is independent from time and place restrictions. Around 20 lecturers with more than 40 tutors from 11 German and one Finnish university are involved in the conduct of the study.

A study of business computer science opens up interesting perspectives for the participation of these and other innovative technologies: E-Commerce, E-Banking, Customer Relationship Management (CRM), Supply Chain Management (SCM), E-Work / Telework, E-Government, Web 2.0, E-Learning.

The master program is organized in the modules where theoretical and methodological skills as well as social skills are learned. The 37 modules are associated with 11 module groups, each having a strategic-management-oriented focus or a technical-operational focus:

- **Strategic-management-oriented focus:** Economics Basics, information and knowledge management, e-business, education management and e-learning, key skills.
- **Technical and operational focus:** Basic technologies, development of application systems, development and management of information systems, data management systems, models and methods for decision support, web and multimedia systems.

### **Target Groups**

As part of diversity management, the following target groups are in the focus of the university and also of the academy:

- People with a migration background
- People without university entrance qualification
- People who want to acquire a degree in the tertiary education

The main requisite for attendance of VaWi is the existence of first university degree of students. It is not necessary that the students should have studied IT- or Economics. Some students have even degree in art history or social pedagogy. But they should have at least some connection in their working experience with IT-related issues. The master course is not directly related to people in mid-ages but the possibility for their participation due to online character is much higher than in regular studies.

## **Decision Making**

At the core of the empirical analysis stand interviews with making series of interviews with decision makers, stakeholders, lecturers and mid-life learners. Between March 2012 and September 2012 seven interviews have been carried out. Four of them have been face to face interviews with a audio recorder. Three interviews have been conducted via phone. All interviews have been typed in and, hence, documented. The following part of the study summaries in thematic groups the results of the interviews.

The Master course has been developed in cooperation with other partners and HE-Institutions. The original idea to develop a virtual learning platform has emerged from the need to use wide range possibilities of internet for online learning. It has been designed as an extension to further training activities carried out at the University. The management of the university has regarded the idea in order to satisfy the apparent demand for IT-related issues and part-time learning forms. The use of internet enables access of students from whole Germany. In fact, over 500 students attend the courses in the current semester and they come from overall in Germany. University Bamberg has a good reputation in the fields of business informatics. It was the main reason to seek for cooperation with them.

Most of the students live in the federal state Baden-Württemberg where the University Bamberg is also located. Followed by Nordrhein-Westfalen and Niedersachsen. Most of the students are male. Traditionally, in such study fields one would have a majorly of males. But in recent years, female students are increasingly interested in such topics.

Students have experience with computers and hence, less problems with the type and form of online courses. Online form makes the participation much easier by being independent of time and space. Most students feel the necessity to update skills and get a degree for further promotion on the job and increase employability on the labor market. Students have mostly a job and attend the master program at the same time. They can arrange studying time flexible and according to their own daily time management. The costs are high but affordable for many students, because they expect to earn more after finishing it. Previous experiences on the job are recognized only partly. Only persons with academic background have access to the master program. Students learned about the program over internet or through other participants or friends. Some students finance the master program by themselves, some are financed by employers. Around 10% of students are supported financially from their own employer. According to own statistics of program managers, two third of the students are between mid-twenty and 40 years old. There are, however, only few students in the master program who are over 45. Among students, especially lawyers and chemical ingenieurs belong to elderly group. According to opinion of interview partner, they think that they always wanted to do something about business informatics and master program with online possibilities would be a good start. The young students are in the beginning of their own career and could start easily with a master program. Older students look mostly for possibilities for a new orientation. Majority of students have a job and nearby attend online master program. Some students try to get a doctoral program and start with academic degree.

In general, the students in formal higher education learn a lot of stuff without knowing their use or the objectives of learning them. Much of the learning stuff has mostly no practical relevance in their occupation later on. In working life, however, they can better assess the use or necessity of certain knowledge which had been either already acquired or still lacking. Through further training programs student have the chance to acquire and develop certain qualifications and skills well-directed and purposefully. This function of further training explains to a great extend the demand and appreciation of master program by the students at the university.



## **Implementation**

During master program there are rather informal contact with external companies and employers. The contacts emerge mostly in form of project work. It may also happen that some students get financial contribution and further assistance from companies in the framework of master thesis. For the selection of students there were personal talks with students. They were invited for an interview in order to evaluate and assess their motives and perspectives. Meanwhile, the students should apply over online platform and they are then evaluated if they fulfill the requirements of an attendance in the master program. In the opinion of interview partners from the management, the marketing activities are not satisfactory. Some further measures should be taken in order to attract attention of target group. 20 experienced lecturers and 40 tutors are involved in the program. The lecturers come mostly from both universities. Various advisor services are accompanying the master program.

With respect to study duration there are different regulations, mainly due to different HE-systems in the federal states. In Baden-Württemberg, for example, there is a max. Study time with 16 semesters. In Nordrhein-Westfalen, on the other hand, there is no maximum limit of study time. If the students fail in attendance of tests or if they do not have success in tests they would get so called malus points. They should have certain credit points within a certain time. If the number of malus points exceeds a certain level, they should leave the program.

The students pay around 100€ per semester, a fixed amount, since they are registered at the university as guest students. Apart from that they pay per module which they attend and per examination.

## **Didactical Aspects**

The lecturers are mostly teaching at the universities, but they have to adjust themselves to the peculiarities of online learning. They must prepare material and offer to download. The teaching themes must be all related to business informatics. Some topics like simulation can't be easily grouped into one single discipline. The lecturers have mostly then free hand to design the modules by themselves. The students must decide in the beginning of the semester which modules they would like to attend.

A central online portal for documents and information. Students exchange views or put questions on certain issues and discuss with other students. They find eventually partners for cooperative study projects and group works. Examinations take place only in the campus of the university and not online. At the end of each semester, examinations in three subsequent days are conducted. Some lecturers request partly performance during the semester. There are as well some performance measures which are regarded as preparation for final examination.

Some lecturers put videos online so that students may watch online or download for later time. This transmit students the feeling as if they follow a real lecture at the university. The documents are either in form of texts or PowerPoint presentations.

With the beginning of the semester in 2003 at the University, a new teaching concept has been initiated which was known as Essener learning environment and which could be regarded as first application of e-learning. The basic idea has been related to the combination of text structures and video-combination. Each teaching unit should be designed small and atomic on its own and they could be combined on demand. By the help of special software, the students construct text material from online portal and take it and print it to read on the way. Videos from lecturers have been integrated into it. But the software at that time was not that much user friendly. The amount of materials has increased enormously and could not be handled

any more. In the course of time, such applications disappeared mainly because huge numbers of materials which accumulated by that time. At the moment, students use scripts or PDF-material. But this can't be called as e-learning any more. For programming modules, students get specific software which they should use by themselves.

### **Evaluation/Impact**

In the beginning of each semester, introductory meetings are organized. Each student becomes name shields with regional labels. It is aimed that regional groups of students come together and build up regional learning networks in some federal states like Nordrhein-Westfalen, Bayern and Thüringen. Students can organize learning meetings among themselves or exchange information via e-mail and other social platforms. In certain modules, the students build learning teams or groups in order to achieve project work together. The lecturers assist students to find and build learning groups. The lecturers claim that alumni network and discussion groups in internet function astonishingly well.

After each introductory meeting, the student becomes an evaluation questionnaire to assess the meeting and to give some feedback for program managers. In addition, each module at the end of the semester is evaluated by students through standardized questionnaire which is filled in anonymously. The questions are related to lecturers, content, organization and structure of the modules. The administrative unit of the master program analyses the results and give feedback to the lecturers so that they can have the opportunity to carry out some adjustments, if necessary. The lecturers should comment on the complaints or problematic issues. After the evaluation process, the results are published in order to enable students and lecturers to orientate themselves in future. Such evaluations are, therefore, central component of the master program in general. After 3-4 months, the students become an e-mail about the results of the evaluation. They can check and compare the evaluation results about the courses or modules with other students.

Students complain that it is not easy to get into contact with lectures to discuss specific issues. Mostly, their advisors are in charge of such questions. In general, the questions from students are answered as quickly as possible. There are some group chats in specific issues as well.

Some students appreciate the flexibility in terms of time and place. But they need somehow real guidelines and intense guide to keep up the program. Otherwise they should have high degree of self-motivation to follow the time table.

Some students have difficulties to estimate time burden for some lecture units. Some are too time intensive, some go much easier. Some students complain about time burden and high number of documents required for some courses.

### **General Conclusions**

In summary it can be stated that the UDE now increasingly looking after the group of people in middle age. With the creation of an office that cares for the purposes of diversity management for the integration of certain groups that have been excluded from further education. After 10 years of experience it can be stated that there is a general positive reputation on the training market.

The master program offer new chances for participants to improve employability and enhance promotion possibilities on the job. Through accusation of master degree and new qualifications as well as by upgrading competencies the student can build up their own capability to cope with the requirements of changing labor market. In general, this stays in

line for an increase in human capital and high relevance to capital building. With respect to social inclusion, however, it seems to be that the master program may have little relevance for social inclusion, since the participants have already a high academic degree. Nevertheless, by capacity building and upgrading competencies, the participants could be in future less vulnerable to labor market up and downs and get probably much more easily a new job.

The contents and structure of the lectures are not specifically adjusted according to the needs of midlife-learners. However, the modules must be designed in accordance with the necessities of virtual learning. Students demand, however, better adjustment to the online form of lectures. Time guidance and better advice services for students need to be improved.

Evaluation methods and procedures are, in fact, well developed. Regular evaluations and the analysis of internal evaluations provide feedback for continuous improvements of the master programs. The master program should be accredited and certified by the accreditation commission in Germany in regular periods. As a prerequisite, the university should deliver evaluation reports to the commission. Lately, the master program has been certified in 2011.

With the virtual learning platform the master program have accumulated practical and valuable experience. The coordinators of the master program claim that such platforms would be a useful extension and complementary to the regular study programs at the university. In the face of diminishing financial resources of the universities and overcrowded seminar rooms in many universities, this would relieve certain problems and offer students new possibilities for an effective learning.

Further training as an idea is in general appreciated in the university. However, the question of financing seems to be one of the most crucial aspects which may set back valuable programs and plans with respect to further training activities.

Students in further training programs are registered as guest students, which is a typical procedure in several federal states in Germany. This leads to the problem that all further training costs must be covered through program fees. Consequently, selection and implementation of such programs depend highly on cost considerations rather than content and structure consistent with the middle and long term labor market needs. Another problem in this context is related to the time burden of the lecturers. They are mostly university lecturers and their time burden for additional further training are not accounted as working time which is as a consequence responsible for the reluctance of lecturers to initiate and implement further training programs.

Furthermore, there is no coherent Lifelong-learning strategy at the university. Main strategic preference is related to building up a research profile in academic community. This can be traced back mainly to the history and to the combination of two different universities. In future, it can be expected that further training programs will still exist in one or another form. But the strategic priority lies in research and teaching activities.

## Case Study III: Open University (Fern-Universität) Hagen

### General Information

Established in 1974 as a university of the State of North Rhine-Westphalia, this university was one of the first universities in Germany which offer distance education and go online with teaching, supervision of students as well as administration, thus breaking completely new ground. The goal: highquality study opportunities, optimally adapted to a great variety of situations in life, for all those who cannot or do not wish to enrol in a campus university, whether for job-related or private reasons, such as persons in employment or trainees.

With respect to LLL, the Open University has a special status. People aiming for a degree in the second or third chance education build the central target group; therefore, the concept of lifelong learning plays a special role. This orientation is also confirmed by the following figures: 80% of students go to a regular professional activity besides studying, 40% have already completed a course of study before. The university has more than 79,000 students in Germany, Austria, Switzerland and Central and Eastern Europe, with a slight preponderance of male students (55:45). 10,944 of them are over 45 years old.

The average age of students is between 29 - 35 years. Although, persons in middle ages are not core target group, the age structure of Distance University is clearly above than the age structure of other universities. In general, there are no age specific offers for persons in middle ages. The university has no age specific orientation, but rather a thematic one. A number of programs are offered for people who are already engaged in the labor market and who want to acquire further qualifications

Prospective students find a wide range of subjects and combinations of subjects for study in the faculties of Humanities and Social Sciences, Mathematics and Computer Science, Business Administration and Economics and Law. Of course, the FernUniversität also offers opportunities to earn doctorates and to take a great variety of further higher education courses.

Moreover, the FernUniversität is already successfully practising today what politicians and the business world have been demanding for a long time: opening the university to more permeability within the educational system. Under certain conditions, it is possible to study at the FernUniversität even without a formal university entrance qualification. The FernUniversität Hagen supplies the great demand for further higher education like no other institution in Germany.

Distance learning differs significantly from the normal study at a university in some points. The students don't have an obligation to attend and can do their work at home. The materials for their studies is sent to them in printed form, on CD/DVD or provided online.

Also the university has an individual support system. The support activities have been extended with the help of the internet recently.

A typical study program to which on average more people in middle age participate is the Program "Infernum: The interdisciplinary Distance Learning Program for Environmental Sciences" Master's course in environmental science. On the background of general LLL-Strategy of the university, this specific program has been focus of the following case study.

The interdisciplinary "Infernum" ("Interdisciplinary Distance Learning Program for Environmental Sciences") Master's course in environmental science is the first academic degree course nation-wide that has been developed in cooperation with a Fraunhofer Institute. This cooperation with the Fraunhofer Institute aimed at providing a future-oriented further education in the areas of ecology and sustainability. Tailor-made programmes for various

occupational categories and individual study opportunities in open access studies round off the range.

In November 2000 the master studies program, which is offered in cooperation between Fraunhofer UMSICHT and the FernUniversität in Hagen (Open University), started with 43 students. Meanwhile 550 students are enrolled. This number proves the success of this program as future-oriented further training in the fields of environment and sustainability.

### **Target groups**

Employees in business, associations, science, administrative bodies, freelancers and qualified junior scientists get insight into cutting-edge technologies and interdisciplinary know-how in environmental technologies.

The central idea behind the program has been related to supporting the further education of employees to work in a desired field. It was one of the few further higher education courses which prevailed in the market and which was supported by the universityinfernium– imparts environmental know-how from more than 10 disciplines and qualifies its students – who are mainly enrolled in the program parallel to their job – to think and act in interdisciplinary ways. In 2005 infernum was assigned the label “official project of the United Nations Decade for the Education for Sustainable Development 2005-2014“.

Graduates are qualified to realize sustainable approaches to complex environmental tasks in companies and in the society and to act as promoters with managerial responsibility and strategic vision.

### **Decision making**

At the core of the empirical analysis stand series of interviews with decision makers, stakeholders, lecturers and mid-life learners. Between March 2012 and January 2013 nine interviews have been carried out. Seven of them have been face to face interviews with an audio recorder. Five interviews have been conducted via phone. All interviews have been typed in and, hence, documented. The following part of the study summaries in thematic groups the results of the interviews.

The program has been created in the beginning by two professors from the FernUniversität Hagen particularly to support the city Oberhausen. It was planned in the beginning to establish a small university in the City Oberhausen. But this concept could not be realised due to financial and administrative reasons. At the end, the usual distance learning form had been kept.

The students have interested in research in the field environment science. The program delivers training and additional qualification possibilities and opens new job perspectives. Students want to acquire additional skills either for their current job or expect new opportunities in the labour market with a higher level of qualification. The students have mostly a full-fledged career and distance learning is more suitable for them.

Possibility to study in parallel with the job and flexible curriculum as well as possibility to adapt it to students' interests is highly appreciated. 5 to 10 percent of the students are funded with support by their companies. The others have to carry the costs by themselves. Another major criterium is related to relativ low costs of the program compared to training offers in the market.

## **Implementation**

Infernum lays the knowledge foundation for the integration of ecologic, economic and social aspects of sustainability. The master's degree program enables networked thinking and encourages creativity and innovation capability. As a distance learning program Infernum supports its participants in working independently in a structured way and in acquiring specific knowledge. The information is imparted by manageable learning units in the form of "Studienbriefe" as well as by internet-supported units. Class-room seminars and excursions focusing on current research results and practical examples complete the program and help to intensify the contact between the participants and the supervising scientists. After the successful completion of the accredited program graduates are awarded a Master of Science (M.Sc.). The curriculum includes a variety of modules and is divided into the following three content areas:

Area 1: Legal, Social and Economic Sciences

Area 2: Natural Sciences and Engineering

Area 3: Interdisciplinary cross-cutting issues.

In the 4th Area, which is called the profile area, is set up the composition of the three modules. Here, personal profile is formed by other studies and examinations of the participants. Participants should cover all content areas on the study assignment. Requirements depend on the type of the selected training program and study chosen. The extent of the area in each module depends on the previous degrees.

The master's program infernum requires a high school degree and leads to an internationally recognized qualification degree "Master of Science". The master program can be completed with 60, 90 or 120 credits, depending on the previous degree. For an infernum master degree, a total of 300 credits are required.

The students can choose desired parts and modules and link them with other courses. The lecturers have experience in adult-education; some of them work at the Fraunhofer UMSICHT, which is a cooperation partner of this program.

The lecturers claim that the students participating further training program are much more motivated than in the normal university presence courses. The students know, in opinion of interview partners, mostly why they study. They possess, of course, a university degree and experience in learning. In their professional life, the content and the fields of their work have also something to do with the major topics in the program. The students have acquired in their working life somehow an expert status in the fields of environmental issues. Either they want to promote in the current work or reorient themselves and overtake new management or institutional tasks.

The lecturers try to cooperate with the employers. The issues and topics from the daily working life of the students are welcomed and are treated, as much as possible, in the lectures. The teaching stuff gets by this way new impulses and new ideas from the practice site as well.

## **Didactical Aspects**

The curriculum combines different elements of blended learning to provide students a largely space-and time-independent studies. It consists of

- Study letters (teaching texts and readers)
- Virtual Learning Environments

- Classroom seminars

Printed teaching texts (Study letters) will be posted and in addition, students have access to electronic form in the virtual learning environment. Some printed reader containing various articles from scientific journals are provided as well

Virtual learning environment "Moodle" is currently in use. On this internet platform, students would find teaching texts of the modules as PDF files, further reading and information on-site seminars. On this platform, the exchange with fellow students and carers at the center is supported as well. In addition, depending on the thematic and didactic orientation of the module, online lectures and meetings are offered in virtual classrooms via Adobe Connect and virtual group work.

In selected modules, face to face sessions are offered. The classroom seminars serve to discussing current issues in an interdisciplinary environment. They play an important role with regard to the transmission of social and communication skills. Furthermore, classroom seminars offer opportunities to deepen the course content with discussions with other students as well as with lecturers.

The lecturers have experience in teaching and adult building. Their experience results, however, mostly from practical work and professional teaching function. There is no systematic didactical approach and training for the lecturers. The mostly used method is learning by doing. The major aim is that the students cope with the teaching material alone and presence sessions serve to deepening of topics. The lecturers have to adapt and rearrange the print material accordingly. The printed material should include all relevant information to a specific topic, all technical terms should be explained, and all necessary literature, further material and sources should be listed. Furthermore, the text should contain examination or test part so that the students can check on their own if they have understood the content.

### **Evaluation/Impact**

Each module is evaluated with a special questionnaire or through a feedback discussion at the end of the course. The course has been positively evaluated by the students helping them to fulfill new tasks in the environmental research. Interdisciplinary know-how has a great impact for the further employment. The students criticized that for some modules; too much previous knowledge is required.

The program was one of the few further higher education courses which prevailed in the market and which was supported by the university

In general, according to program directors, the program "inferno" has still some difficulties to be accepted within the Open University. The main reason for this results from the fact that it is a further training program, which has, like other further training programs in Germany, still problems with the regulations. For the lecturers and professors or other staff who invest time and resources in such training programs, it means simply an additional work time. It is not regarded as core working time. Another reason is related to the general strategy of the Distance University, which considers graduate students and courses for them as major target group and main activity. The set up and implementation of such further training programs depend on willingness and readiness of the lecturers or staff to have self-interest and to get involved in the process at all. The professors and other staff who are already overwhelmed by the existing teaching duties and by the scarce time, are not that much interested in additional training programs. That is the reason why some many further training program initiatives in the distance university are not set forth. In some cases, as the professors who initiated and

implemented such programs have retired, it was not possible to find any successor. Furthermore, such further training programs are mostly not institutionalised and designed not on permanent base. The training program “Infernum” for example must maintain its own examination office and can not draw resources from deanary of the distance universits. This means, the program must use its own resources and funds for examination activities. As to the support and advisory functions the problem remains the same. The program must operate outside the normal structures of the distance university. The teaching stuff state that advisory and support activities should be improved. They, however, can not afford naturally any individual care.

## **General Conclusions**

The program provides graduates knowledge and qualification for new employment possibilities in the field of environmental sciences. With a strong focus on working people and professionals, the University differentiates itself with respect to competing offers from other universities. Target audience of the course is the professionals with a first university degree or college degree who want to acquire environmentally-related skills. The curriculum is structured; the content is consistent and meaningful in terms of the overall learning objective of the acquisition of interdisciplinary oriented knowledge and skills. Thanks to the variety of modules, students can customize their studies to their own interests and needs in order to achieve the overall objective. In particular, the successful cooperation model between the university and the scientific environment provides a useful link to the application-oriented research.

The profile of the program “Infernum” as distance learning is particularly attractive for working people in middle ages due to the flexible design of the training and individual focus. After completion of the study, students could extend their tasks in the domain of environment science and other closed domains. The program does not directly address people in middle ages. Since a university degree is a prerequisite access to the program, students are over certain age. In general, the age range is between 25 to 60 and most of students are between 30 and 40. Persons over 40, though small percentage, attend the program as well. This course can contribute to the development of new networks and social integration of middle-aged learners and effect social inclusion positively.

The interview partners from the institutional site highlight institutional embededness of such programs in order to get success in establishing further training programs as well as to achieve continuity.

Another recommendation is related to general laws and regulations in the country with respect to further training strategy. The time spent by the teaching stuff in such further training programs should be acknowledged and recognised as a part of normal working time and not like by now as an additional burden. It is not necessary that the teaching stuff should be engaged to 100 percent in further training, but it would be enough around 25 percent of the working time to be accepted as a part of main working time. This would give rise and motivate to new initiatives and programs in further training in academical institutions. In opinion of one interview partners, the major obstacle lies in the fears of politicians that any strengthening of the further training courses in the universities would be at the expense of first degree students. If lecturers and teching stuff would be engaged full time in such further training, nobody could explain it to the public. But this should not be the case, if only a



certain time amount would be invested in training programs. As a result, by now at the institutional level, nothing happens, although the problem as such has been already perceived at political level.

## 5. Comparison of three cases: Commonalities and Differences

All the three cases are in fact different cases with their own history and institutional settings. Nevertheless, some similarities and differences can be identified which would give new insights about the TLL-activities in HE-institutions in Germany. Since all HE-institutions operate more or less in the same regulatory framework, even taking different forms and practise in different federal states into account, problems and obstacles with respect to involvement of HE-institutions in the TLL-activities would be evident. The major findings of the analysis of three cases can be summarised under following topics.

### Organisation

There is a growing tendency in the German HE-system where increasing number of universities try to outsource further training activities as a separate administrative unit within the university. With respect to **organisation** TLL-activities, except the Fern-University Hagen, both other universities apply the same administrative structure. In the case of Ruhr-University Bochum and University Duisburg-Essen, new administrative units have been created with their own autonomy and financial resources, whereas in the case of Fern-University Hagen the master program is a part of general distance learning system. In all cases, cooperation with other actors and institutions played a decisive role during the starting phase of the programs as well as in der implementation stage.

The administrative units in case studies have all autonomy with respect to design, content and structure of the programmes. In all cases, the selected programmes for detailed study have external partners who work intensively on the implementation of the programmes. Hence, external partners played in stages of program initiation a decisive role as well. External partners overtake teaching functions as well by appointing occasionally staff during the implementation phase. In the case of Ruhr-University Bochum, the participants acquire a certificate in cooperation with the business of commerce. In case of University Duisburg-Essen and Fern-University Hagen, the programmes are to be certificated officially by the university and central certification office in Germany, since they are master programmes with an official degree.

Teaching staff is motivated mainly by additional payments. Through further training activities, however, they have the opportunity to get in contact with companies and, hence, collect for themselves practical experience and build up a network and extend further cooperation possibilities.

### Social Reach

Due to stick regulatory framework of the German HE-system, universities are subject to certain limitation with respect to opening to wide population groups. In case of RUB, the target group is the work council members who are still employed and looking for reorientation in the labour market. The participants in the programmes in the Fern-University and University Duisburg-Essen are able to follow the courses and modules over online platform and at the same time do or can be active in the labour market. The majority of such participants are employed and attend distance learning and virtual learning platforms mainly due to their flexibility in time and place. The **reach of the programmes** in the case studies is somehow limited with respect to scope and content of the programmes and access limitations of the universities. As in case of Fern-University and University of Duisburg-Essen the participants should attest a first university degree or at least certificate for accessibility to a

university. Persons without such certification or degree cannot attend the programmes. Even though in the past some measures were taken in order to ease the participation of people without degree, but only in few universities in Germany one would find corresponding programmes which acknowledge prior professional experience even partly as a prerequisite or sufficient precondition for studying.

### **Curriculum development**

In the case of Ruhr-University-Bochum, the participants have, in general, no academic background and had even no contact to any academic institution during their previous working experience. The lecturers and program initiators have taken this into account while planning study design and content preparation. This allowed a balance of professional-oriented contents and scientific knowledge in order to achieve optimal learning process. The program targets directly an increase of employability of the participants. The participants want to reorient themselves after somehow long period of work council duties and look for either new position in the company or a new job somewhere else, but with new employment possibilities. After ten years of experience in the training market, the managers of the program claim that most of the former participants report a positive effect and new orientation in their working life.

The participants of the virtual learning program in the University of Duisburg-Essen, have already an academic background and want either to upgrade their knowledge and skills or to acquire new qualifications in order to achieve better payment or positions. They have to overtake the costs to a great extent, which leads to a high intrinsic motivation. The same motivation accounts for the attendance of master program in the Fern-University Hagen. In both universities, the programmes focus on a combination of scientific-knowledge with the professional needs of the participants. Since many participants are working part time or fulltime and have, hence, professional experience, this leads to incorporation of practical experiences into program contents.

### **Teaching and learning**

In all cases, the participants have mostly professional experience. The question arises about the adjustments of teaching methods and materials to the needs of such particular groups. Beside existing professional experience, such groups are over certain age and cannot be treated as first degree students.

The program content and design the of the Ruhr-University-Bochum take the previous profession experience of the students into account and support, for example, at the selection of project work which can be highly relevant to their own company. Since many participants had no academic background, the content and learning materials are adjusted to the specific needs of the students. Students are encouraged as well to make suggestions based on their own professional experience. Since the students attend courses in form of block seminars and mostly allowed by their own employers, time considerations do not play a certain role for any participation.

The students of the programmes in the University-Duisburg-Essen and Fern-University-Hagen follow the courses on the virtual platform and work at the same time. They have mostly certain work experience. The content of the programmes take this fact into consideration. In case of age, however, the picture is a little bit different. Age as a factor play no role at all, neither for the adjustments of teaching materials nor learning needs. Students are expected to

have academic learning history and should follow the courses if they want to update and upgrade their professional skills.

A selection criteria for the teaching staff is related to their experience with adult learners. However, in practice most of the teaching staff are university professors or lecturers at the university who try to adjust the content and didactics to the needs of the participants as much as possible.

### **Assessment of impact of programmes**

In all cases, there are regular internal evaluations either at the end of each teaching modules or semesters. But those procedures are mainly directed to assessment of satisfaction and identification of problematic issues. The results of such evaluations serve for improvement of courses in future. Former participants are encouraged to engage in alumni networks. But students are not offered an ex-program guidance for further working life. Follow-up studies are not conducted in order to evaluate labour market perspectives of the former participants.

### **Advantages and disadvantages of the three cases regarding TLL**

Regulatory framework in Germany with respect to extension of training activities have been improved in recent years. Hence, the design and implementation of TLL-programmes have experienced new impulses in order to establish further training as a third pillar beside research and teaching in the higher education institutions. HE-institutions enjoy nowadays much more autonomy with respect to organisation of such activities. A closer look at the lifelong learning activities demonstrates that HE-institutions follow more or less the same strategy. Either such training activities are outsourced or are organised within the university but as a different administrative unit.

In the cases of Ruhr-University Bochum and University of Duisburg-Essen, the main training activities are organised in an autonomous administrative units. Due to the fact that further training don't become any financial assistance from the state and all activities and programmes must cover the costs by themselves, there is a growing tendency to commercialisation and market orientation. Consequently, the selection and implementation of the programmes depend highly on the chances of cost-coverage and attractiveness to the potential participants. The organisation of further training in autonomous administrative units allows design and application of flexible and effective solutions. Fluctuations in the demand and changing labour market conditions and needs may threaten continuation of certain programmes which do not have enough cost coverage.

Program managers perceive strong competition in the training market. As stated by some interview partners, marketing activities are still underdeveloped and need to be improved. During the initiation and design of programmes, program managers observe labour market demand and needs for further training. But the decisions for training programmes are made usually on the basis of cost considerations rather than employability or labour transitions. Such effects are regarded as side effects, but may not be the major factor for decision making, since as autonomous administrative units financial resources must be secured.

Except the Ruhr-University-Bochum, other case studies are oriented exclusively on adult learners at certain age and with professional experience in the labour market, but not specifically on midlife learners. In certain programmes, one would find occasionally midlife learners, but neither content nor didactics are adjusted to special needs of such age groups. They have to cope with study material and contents like other usual participants.

## 6- Typology of Case Studies

	<b>Case Study I University Bochum</b>	<b>Case Study II University Duisburg- Essen</b>	<b>Case Study III University Hagen</b>
<b>Institutional Setting</b> (University centred, outsourced entity, Knowledge transfer etc.....)	Further training activities are mainly organized by the Ruhr-University Academy (RUB). The program “Change Management” offered by this academy has been chosen within THEMP.	Many further training activities are carried out by the Ruhr Campus Academy, founded in 2001, supported by the university. The chosen program within THEMP is VAWi (Business Computer Science).	The University Hagen has a special status, because people aiming to have a degree in the second or third chance education build the central target group, so the concept of LLL plays a special role. The chosen program within THEMP is “Infernum: The interdisciplinary Distance Learning Program for Environmental Sciences”.
<b>Target</b> (Unemployed, At risk, Employed, high Potentials)	The program is oriented to people who work in positions as employee’s representatives particularly members of work councils.	Following target groups are in the focus: People with migration background and people who want to acquire a degree in the tertiary education.	The program is addressed to employees in business, science, administrative bodies, freelancers and qualified junior scientists who want to acquire environmentally-related skills.
<b>Access to the Program</b> (University degree, open to everybody, degree and professional experience etc.....)	The participant have usual no academic background and even never had contact to an academic institution  They have long years of occupation practice and experience  The participants belong middle-aged groups	A minimum 3.0 in a qualifying program at a university or equivalent  At least one year occupational experience  IT-related competencies equivalent to one year BA-program in computer science, economics or ingenieur science	The master’s program Infernum requires a university degree and can be completed with 60, 90 or 120 credits, depending on the previous degree  A first university degree or college degree are required
<b>Construction of the Program:</b> (Incidental, Stand alone, Structural, Integrated)	The program is cooperation with the MP5-Consulting firm. The program lasts 13 month and requires a 30 day presence of the participants. A 6 month practical project has to be finished by the participants.	VAWi is a joint master study project of the economic faculties of the University Duisburg-Essen, University Bamberg and the Institute FIM Erlangen-Nürnberg to achieve IT-related issues and to use part-time learning. The program duration is different conform regulations of higher institution in the federal states.	The program has been created by two professors of the FU-Hagen to support the city Oberhausen. At the end the course is a usual distance learning program as a cooperation between the university and Fraunhofer Umsicht.

	<b>Case Study I University Bochum</b>	<b>Case Study II University Duisburg- Essen</b>	<b>Case Study III University Hagen</b>
<b>Didactic Orientation:</b> (Programme, Teaching-Learning, Activities, Practice Orientation)	The programs focus is on linking the theoretical background knowledge with practical implementation of newly gained skills. The lecturers must be able to transmit academic finding, show practical content and adapt it to the target group. Most of them are professors of the university in Bochum, but also external lecturers with economic background.	The program is based on 100% e-learning and has modules with different specialization possibilities. 20 lecturers, 40 tutors are involved in the course. There is a central online portal for documents and information, some lecturers put videos online. The content and structure of a lecture is not adjusted to midlife learners needs.	The curriculum combines different elements of blended learning to provide students a largely space and time-independent studies.  It consists of: <ul style="list-style-type: none"> <li>• Study letters (teaching texts and readers)</li> <li>• Virtual Learning Environments</li> <li>• Classroom seminars</li> </ul> The lecturers have experience in teaching and adult building mostly from practical work.
<b>Outcome:</b> Award/certificate/d egree type or professional recognition	A certificate designed in cooperation with the IHK (chamber of commerce) which enjoys a high level of reputation.	Master degree in Business Computer Science. The master program is accredited and certified in regular periods by the accreditation commission in Germany based on evaluation reports delivered by the university.	The course leads to an internationally recognized qualification degree “Master of Science”. For this certificate a total of 300 credits are required.
<b>Intended Impact:</b> (Career maintenance, Career development, Improved practice, Changed practice, Generic or specific career pathways)	Endowing the participants with necessary tools for improving their daily work in the work councils and to prepare them to take other responsibilities in the company  Improving enhancement of employability in the labour market  New orientation on the labour market and make transition easier	Necessity to update skills and get a degree for further promotion possibilities on the job and increase employability  Preparing for a doctoral program	Providing graduates with knowledge and qualification for new employment possibilities in the field of environmental sciences
<b>Evaluation (measured in what ways)</b>	Constant evaluation in every teaching unit particularly through evaluation forms fulfilled by the students	Introductory Meetings are evaluated by students with the use of questionnaires.  Each module is evaluated at the end of the semester	Each module is evaluated with a special questionnaire or through a feedback discussion at the end of the course

	<b>Case Study I University Bochum</b>	<b>Case Study II University Duisburg- Essen</b>	<b>Case Study III University Hagen</b>
		<p>by using questions related to lecturers, content, organisation and structure</p> <p>The administrative unit of the program analyses the results and publishes them to improve the course</p>	
<b>Social inclusion:</b> (human capital, social capital, cultural capital)	The program has successful contribution to social inclusion of participants by capacity building where a new orientation and reintegration of participants to the labour market is strongly emphasised.	The program supports the building of own capabilities to cope with requirements of change labour market. The master program has little relevance for social inclusion.	The program “Infernum” is particular attractive for working people in middle age due to the flexible design of the training and individual focus and can contribute to the development of new networks and social integration of middle-aged learners and affect social inclusion positively.
<b>Conclusion and future perspectives</b>	<p>The program differs from typical university programs by taking into account needs of the participants in each step</p> <p>The development of such training program by the universities is regarded as problematic, because universities staff concentrate mainly on teaching and research and many of them have no practical experience in companies</p>	<p>Selection and implementation of such programs depend highly on costs rather than content and structure consistent with the middle and long term labour market needs</p> <p>University lecturers are often not interested in further training programs, because the time for it is not considered as working time</p> <p>The university will improve training programs for middle aged people and will develop new training programs</p>	<p>The program does not directly address people in middle-ages, but many participants are between 40 and 60. The interview partners from the institutional side highlight institutional embedding of such programs in order to establish further training programs and to achieve continuity</p> <p>The time spent on teaching staff for further training should be recognized as a part of working time and not as an additional burden</p>