

**RePro  
Project**

Real-Life Business Projects in  
Multicultural Student Centered Learning



## Real-Life Business Projects in Multicultural Student-Centred Learning (RePro)

**FINAL EVALUATION REPORT**

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## TO THE READER

Student-centered and working-life-oriented learning has been a goal of several teaching development projects in the last few years. A special attention has been focused on increasing internationalization. The aim of this evaluation report was to find out how the student-centered and working-life-oriented approach to the teaching of business economics in higher education is carried out in a multicultural environment. In addition to Finland, Poland, Great Britain, Latvia, Germany and Italy were involved in this development project. During the years 2004-2007 the results of the development work were tested and evaluated. The feedback and self-evaluation of these years have been compiled together.

Evaluation involves determining the value or merit that this development project possesses and will possess. In future, the value of this project can be seen e.g. in the fact how extensively the results of the project can be utilised both on the national and international level. The REPRO-model produced by the project is one way to perceive learning, guiding and teaching. The profound understanding of the model and its wider utilisation in the pedagogy of each participating country can be seen only in several years' time.

Efforts have been made to evaluate how the targets of the project were reached during the entire development process. Based on these observations and feedbacks it was possible to present the main points for further development as well as methods how to disseminate results and products already achieved.

As the RePro-project is the development project of learning, the motto of evaluation could be: "Nobody will ever learn everything about evaluation, every experience teaches something new". (Cronbach 1982, 335) We hope that this evaluation report will raise something new to the reader and takes thus the development of learning one step forward.

Hämeenlinna, 22 May 2007

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# 1. EVALUATION IN THE REPRO-PROJECT

## 1.1 Starting Points of Evaluation

### 1.1.1 Users of Evaluation Information

The aim of the RePro-project was to develop a student-centered teaching and studying model for business economics (REPRO-model), which enables teachers to build and develop cases based on the situations and “stories” of real business enterprises in the multicultural environment. The primary target groups have been teachers, students and business enterprises.

The outcome of the RePro-project was 12 RePro cases supporting student-centered learning, which were created collaboratively and tested in multicultural teaching and learning environments. The project also produced two guidebooks which guide students to learn in accordance with the REPRO-model, and teachers are guided to apply this model to various learning environments.

Evaluation has been an essential part of the RePro-project. Its aim was to support to reach the targets and to give the members of the project, especially teachers, feedback and peer evaluation information. What is expected from the evaluation, has an effect on how the evaluation is made and what kind of information is gathered. Hence, it is important to answer the following questions at an early stage of the project:

- who use/uses evaluation
- what is expected from evaluation
- why is evaluation made
- what is evaluation used for.

The evaluation information produced by the RePro-project is used primarily by financiers but also the sponsoring organisations of the participants, joint ventures, teachers, students and naturally the persons and researchers who are interested in learning and teaching. The aim of the RePro-project working over

the network in the multicultural environment was to create mutual understanding about what evaluation information is used for during the development process and after it ends. The following list shows, on the other hand, the producers of the evaluation and feedback information and, on the other hand, its utilisers and users.

- Evaluation information is primarily used by the members of the RePro-project (teachers, students, companies and evaluators)
- Evaluation is made for supporting the development of the RePro-project's quality and operation. (the project calls for the commitment of all members)
- Evaluation is expected to make impacts and give directing information
- Evaluation is used as a support for learning and it helps to direct future activities (peer support and peer evaluation)

The aim of the evaluation information is to give recommendations and good practices to develop activities. That's why this report aims to gather all the differently obtained evaluation and feedback information and use it for making proposals to the dissemination of good practices and to further development. Consequently, the standpoint of evaluation is development.

The evaluation was primarily based on the self-evaluation and internal evaluation of teachers, students and companies. The evaluation has been planned in the way that it has been closely connected with the other areas of operation in this project. The intention was to make evaluation as open and transparent as possible, which is why the project used e.g. an electronic project management template. (Rissanen & Mäntylä 2007.)

### **1.1.2 General Ways of Action in Project Evaluation**

Traditionally the benefit gained from the project has been evaluated in terms of its impressiveness. It has been evaluation which was based on the results of objectives. It has been possible to evaluate impressiveness separately for financiers and for those who had given the assignment. Besides those who have given the assignment, evaluation information has also been thought to

benefit its producers and developers as well as the actual target group, end-users.

The evaluation of the development project is generally focused in two ways (e.g. Robson 2001). The most typical evaluation is made during one period of time towards the end of the project. This implies that evaluation is a spontaneous action, where the end results are the target of interest (so-called summative evaluation). The RePro-project used a so-called formative evaluation instead in the course of the entire project. Formative evaluation is suited for situations where information is needed for the development of the project and for directing operations – this is what has been done in the RePro-project during the entire process. The starting point of evaluation has been the benefit gained by the developers and the target group in particular, and that's why evaluation was planned and specified during the project together with its various members.

### **1.1.3 RePro-Project's Evaluation Targets and Sources**

The RePro-project's peer and self-evaluation produced a lot of information both on the aimed products (cases, manuals and REPRO-model) and on their continuous development. Peer and self-evaluation information was compiled into a testing report and its results were evaluated once more together. The diagram (Fig. 1 below) gathers the evaluation targets of the project together. At the same time it shows the pedagogic progress of the development: how the REPRO-model has been derived from the student-centered and working-life-oriented learning orientation, how the manuals guide to this kind of learning and teaching and how the case has to be built taking these starting points into account.

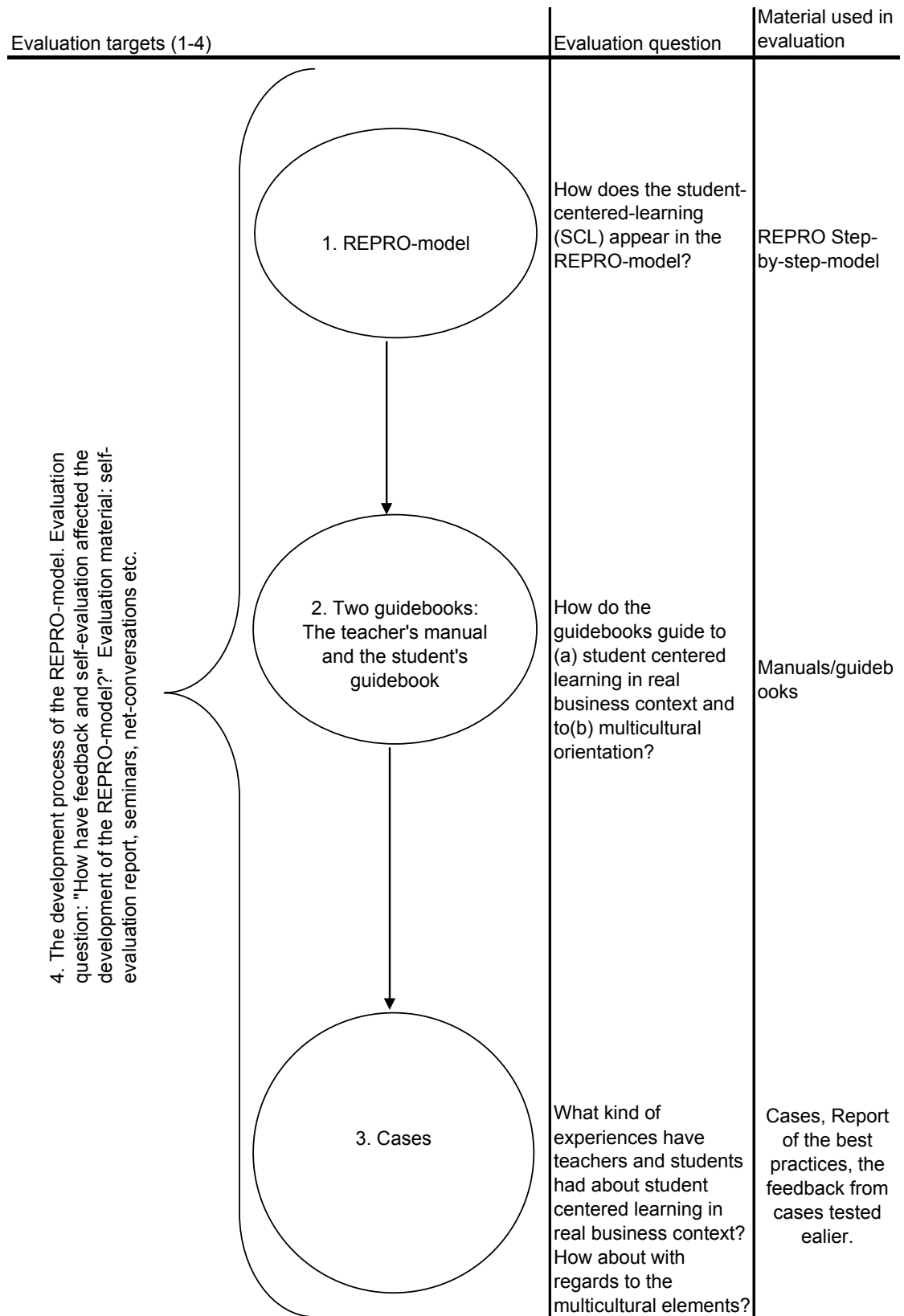


Fig. 1: Evaluation reference frame in the RePro-project (Mäntylä & Aarnio).

The evaluation information produced in the RePro-project has been analysed in full in the project's compiling internal evaluation. In fact, the evaluation involved reflectation of the RePro members' and other participants' own work. The summative evaluation information has shown in the first place how the

RePro goals were carried out (e.g. RePro cases, model and manuals and the student-centered pedagogic approach). The appropriateness of these results has been compared to the pre-set criteria, which included, among other things, the narrative nature of the cases, multidisciplinary aspects of the cases and student-centered approach) Results and products have been modelled to good practices and the intention is to disseminate and root them even more widely.

## **1.2 Factors That Contributed to the Rise of the REPRO-Model**

### **1.2.1 Critical points in student-centred learning**

Many researches bring out that the quality of teaching and learning could be improved by student-centered learning environments. Though a student-centered learning environment is primarily used, a systematic and well-organized learning system will be not rejected; on the contrary, when students are wanted to guide toward self-directive learning environments decisions must be well planned and organized. (Rasinkangas 2005). The critical points of student-centered learning (SCL) are crystallized as follows:

- students take responsibility for their learning and commit themselves to the learning process
- students integrate their learning goals with real life
- students acquire information actively
- students investigate things and solve problems
- students build or create information
- students work together with their peers as well as with experts
- students evaluate their own and other students' learning and action
- students produce artifacts
- students develop their metacognitive skills.

To build these critical points that are important to student-centered learning to a learning process requires the teacher's excellent pedagogic skills, which is often at the teething stage in today's learning environments.



## 1.2.2 The learning model of RePro cases

The project did not create an entirely new REPRO-model for learning business economics substance as originally planned but the REPRO-model developed by the project is based on the inquiring learning model developed by Hakkarainen, Lonka & Lipponen (2001). Thus the RePro cases were built adapting the inquiring learning model, when the student and real-life are in the centre of the learning process. The RePro cases built in the RePro-project aimed at learning the substance of business economics are thus based all in all on the idea of student-centered learning (SCL). The figure below (Fig. 2) presents the phases (1- 7) step by step how the learning process should proceed in the RePro case examples

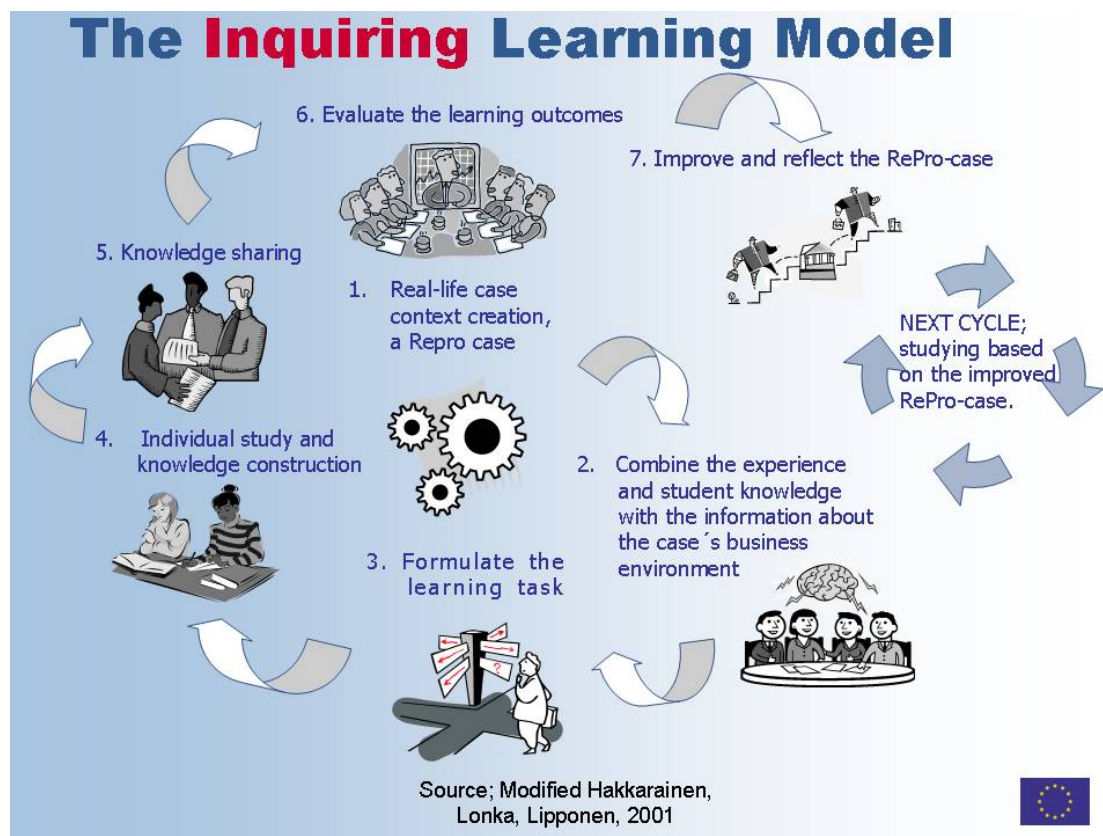


Fig. 2: The inquiring learning model in constructing RePro-cases (Adapted from Hakkarainen, Lonka & Lipponen 2001).

How then the building of the case examples adapting just this model succeeded, it varied in the RePro cases created in the learning cultures of various participating countries. To apply the inquiring learning model exactly step by step so that the student really starts inquiring things accompanied by the tar-

gets he has set himself is a demanding situation pedagogically for the teacher and for the students. This could be seen in the created case examples. Attending the RePro-project gave a lot of new ideas to think about as well as challenges to apply them. The main thing is that in multicultural cooperation many things that are decisive to learning open up and take their shape more to the participating teachers and students. The project achieved the idea of how to build a student-centered learning process and the students were able to participate in a new kind of learning process compared to earlier in different learning environments.

### 1.2.3 RePro-Model

The following figure (Fig. 3) presents the actual REPRO-model created in the project. It is an outlined picture of what the teacher does in the starting process and what the students do in the authentic learning situation when taking the substance of business economics into possession. The REPRO-model illustrates the fact how the teacher proceeds and what the students do in certain central phases of the learning process.

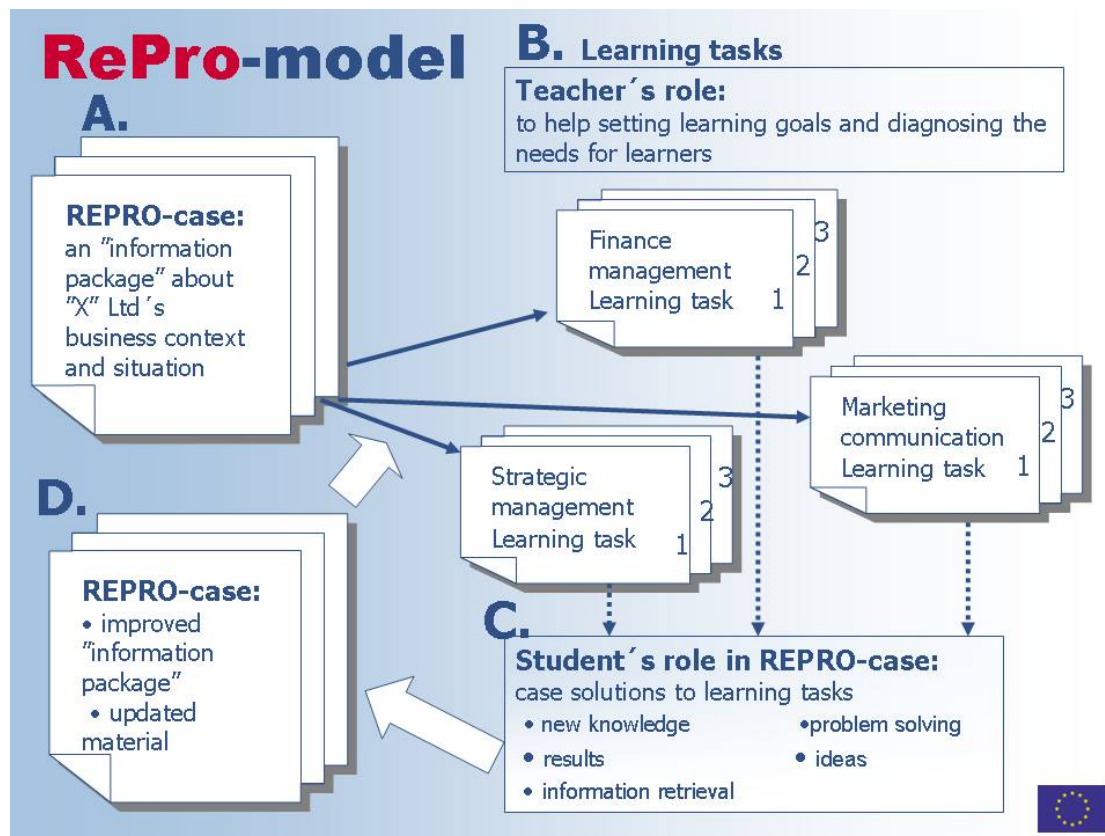


Fig. 3: REPRO-model developed in the project.

The REPRO-model allows the teacher to perceive on the concrete level what kind of parts the learning process consists of concretely. With the help of the model the teacher can also find out with what kind of steps he should start designing a learning process. What exactly the teacher does and what the students do, the model gives a general outline. The built REPRO-model serves thus in overall perceiving and outlining but the teacher naturally needs more specific manuals for more detailed working with the students.

## **2 FINAL EVALUATION**

The results gathered to the testing report were handled together in Italian Busto Arsizio, where the RePro-project's evaluation seminar was held on 2.5.2007-4.5.2007. The aim of the seminar was to examine the RePro approach, the manuals aimed at teachers and students and tested case examples as applications of the REPRO-model. It was a question of making conclusions on the basis of the results obtained from observations and the testing phase. In addition to this, the intention of the seminar was to explore the outcome of the project in general and its dissemination as well as development targets for further measures.

### **2.1 REPRO-Model and Its Usability**

The self-evaluation of the REPRO-model is based on 148 students' and 16 teachers' opinions. Working by means of the REPRO-model was quite explicit to most students, and it had a positive effect in many ways on the students' and teachers' working in teaching/learning situations. The students thought that the REPRO-model was excellent in many ways and contributed to taking the substance of the course into possession. As a rule, the students were considerably more active than before. Giving the assignments explicitly to students is often a challenging job to teachers. Nearly all teachers felt that building the learning assignments by means of the REPRO-model was easier than in the traditional way. In general, the teachers were also able to act as instructors in the learning process based on the REPRO-model, and thus were able to fade their own action intentionally to the background in learning situations.

Integrated learning was better possible in working by the REPRO-model and the students' facility to this kind of working surprised the teachers. All in all, teachers and students were pleased with the REPRO-model's impacts on learning and teaching. Teaching is more authentic, multidisciplinary, reflective, and motivating. You have to plan instructions carefully and you have to trust to students. RePro approach is more innovative teaching method after the students' (64.9%) and the teachers' (63%) opinions. However, the opinions con-

cerning innovative teaching methods differed clearly between the participating countries.

Working on the basis of the REPRO-model made teachers' work more competent and students' work more authentic. Teaching and the entire learning process was more demanding both for teachers and students. Teachers have to plan and construct the learning process more carefully and more thoroughly than in the traditional learning process. The teacher's working is more professional, which has an impact all down the line on the development of the teacher's expertise. The students, on the other hand, have to be more active, they have to commit themselves to the learning process, and they have to evaluate their own progress, collaborate, develop critical thinking and they have an opportunity to find creative solutions. This method gives a better transfer of learning and it is likely that learning results can be utilised even more in new environments.

## **2.2 Critical Points of the REPRO-Model**

This part includes a choice of the REPRO-model elements that might be somehow problematic to teachers or students or that might be difficult to carry out in practice. To begin with, the learning agreement negotiation element as part of the REPRO-model is a new and difficult method to the majority of students. What kind of things should be discussed and what should be achieved is not quite clear. Learning agreement negotiation was also methodically a challenging job to some teachers too. How to act and proceed with students so that the negotiation would be successful and the agreement would become purposeful? Collecting information for inquiring the RePro case and for the team work was in the teachers' opinion very creative in many cases. The students could thus acquire information independently and they surprised the teacher with their skills. Defining the evidence of achievement succeeded well to students and did not cause them any more difficulties. Defining assessment criteria was in two teachers' opinion problematic, because the students' awareness of assessment methods was poor. Other teachers did not bring out any problems to apply this element.

Learning by means of the REPRO-model was a new way of acting in learning and teaching environments to students and also to teachers. Students were not used to learning by inquiring. The way to obtain information, to process information and to work together was new to students compared to the traditional ways of action.

New elements of REPRO model:

- Collecting information (36,5% of the students)
- Working with groups (6,8% of the students)
- Providing the meaningful feedback (39,9% )
- Reflective practice (45,3% of the students).

It is to be noted that 22 students felt that they had not received valuable feedback at all, whereas teachers thought that they had given students feedback properly and well. It can be concluded that the REPRO-model reveals the zone of the students' close development. It would be obvious at that stage that the teacher could tackle these critical points which are important to learning at the right time and in the right way (scaffolding).

### **2.3 Teacher and Student Manual**

The manuals guide teachers and students to SCL in a real business context, and multicultural orientation. Manuals were tested by 16 teachers and 110 students. Both teachers and students assessed the manuals good. They are readable and clear. (75% of the teachers, 68% of the students) and the idea of RePro approach is presented clearly. Some teachers pointed out that the manual contains too much information or that the background in the manual is insufficient. All of the elements in the manual are not explained (e.g. Learning agreement) in sufficient manner (student's opinion). According to some teachers there are elements, which should be shorten e.g. clarifying new terms, reflective practice, group working and collecting information from business. Negotiating the learning agreement is very formative, it should be more free.

The students proposed some addenda to the manual. Here are some examples: "just to make it a bit easier to understand", "explanation of the back-

ground of the RePro approach”, one learning outcome is ”linking theory with praxis”, ”give the hint that the learning agreement should contain SMART objectives”, ”give a hint that cases can be focused on different areas of business administrations”, ”provide a list of assessment criteria”. Further, the students asked to make the following improvements to their manual: ”connect the learning agreement to a time axis”, ”team members could be asked to evaluate each other’s participation in the group work”. The teacher manual should be improved with examples which demonstrate what is meant by ‘reflective practice’. The teacher manual should also contain practical advice on providing meaningful feedback. All in all, both manuals get good notes.

Both the teacher and student manuals have mostly been constructed well. They just need some improvements so that teachers and students could use them fluently. The manual could also be simplified and it would be advisable to add some concrete examples to some elements of the REPRO-model. Some things could be explained more clearly by giving some tips about what kind of learning and what kind of demonstration of learning and what kind of products the entire process is about.

## **2.4 The RePro Cases**

Opinions about the tested RePro cases were collected from 147 students and 22 teachers. The estimations of the RePro cases brought out also different views of learning with the help of REPRO-model. One student, for example, thought that the idea of student-centered learning in the RePro presentation was ambiguous and some students thought that information given to study a certain subject area was not adequate. There appeared some differences between the evaluations of various participating countries.

The following extract is an example of a teacher’s assessment on working and learning based on the REPRO-model:

Evaluation of REPRO-cases/VPG Finland Oy and EJ-Laukku Oy

**Objectives of evaluation:**

**New local “real” material and approach for teaching and learning;** it is a real local case, which can be developed/updated further on.

**Usability of these cases is good;** students can use several sources for information (e.g. websites of the company in Internet) and the cases can be used internationally.

**Teaching and learning methods;** combination of case work and company visit.

Cases can be compared in learning situation, comparative learning method (e.g. international business practices). Also company visits for international students in RePro case companies, training possibilities in RePro-companies, using RepRo- cases in teachers exchange etc.

**The fruits of your case-work;**

- We learned, how to write cases together (however it took some time); rich data, diverse approach, more quality in team work than writing on your own.
- The material is easy to use, because you have participated to the process itself; the case is every ones “own case”/own material”, not just a copy of text.
- Useful to get to know the local company and how to do learning tasks with companies; student’s role has become closer to the lecturers.
- International students can use RePro-cases in their studies; e.g. ones own country described in the RePro-case, cultural aspects present in learning situations.

**The Problems of Your Case Work;**

- Time management; the RePro companies are small, only few persons to be interviewed.
- Financial expert (one lecturer) left the team in the middle of the process.

## **2.5 Multicultural Element**

The RePro-project’s work was multicultural when various cultures met on many different levels. It was the students that benefited most from multicultural activities by working on cases. – Internationalization came true from the students’ point of view very well. There were some language problems,



though, disturbing working somewhat but there is a solution in every institute. However, integrating language studies to these international studies requires flexible cooperation from teachers' part for reconciling methods with goals.

According to those who were involved in the RePro-project, the project enhanced, thanks to its multicultural feature, several things, in particular their own work. They thought that the most important thing was the building of new information and the new REPRO-model thanks to reciprocal contacts. Each party has been able to use the model and the products of the project (manuals, case) at their own discretion in their own work. Adding research to this context produces wider theoretical understanding to the operations regarding education and pedagogy (developing and inquiring approach). Cooperation has revealed the differences and similarities that have contributed to the pedagogy and practices of various countries. One more observation is the fact that the working methods of various organisations in the same country deviate from each other. General discussions and meetings have thus turned out to be particularly valuable and important forums, when efforts have been made to perceive and understand factors affecting in the background of various cultures. Further, the face-to-face meetings during the project have been adequate to perceive differences but they have not been adequate to understand different cultural backgrounds. Languages and communication difficulties as well as inadequacy to spend time together are the factors that have prevented the rise of mutual understanding about the factors that act in the background of various cultures.

The RePro-project opened a new kind of perspective to the education of business economics in Europe. The project also promoted understanding about the importance of personal contacts when developing one's own work. Some participants found uncertainty and insufficiency at the various stages of the project positive: it has promoted one's own professional growth and at the same time given experience about what students will have to do in the REPRO-model. One's own experience about the various stages of the project helps the teacher to guide students on the part-time basis according to the objectives of professional growth. The cooperation during the project and its peer and self-evaluation has been valuable feedback information, which enables the participants to reflect their own work and methods. This is one of the

most valuable things in regard to the development of one's own work and learning new things! That's why in development projects aimed to create something new, the number of meetings is important. Even more important than the number is what the meetings are like – how the working methods are chosen for them so that the formation of mutual information and the definition of the concepts that guide the operations would succeed at a very early stage.

### **3 CHALLENGES CONCERNING DISSEMINATION AND FURTHER DEVELOPMENT**

In this context the main focus is on the teacher's work, even though a student is the centre of the REPRO-model. The reason why the teacher's viewpoint was chosen is the fact that teachers are responsible for the development of pedagogy and in this context, for the development of teaching and guiding according to the REPRO-model. One of the conclusions in the project was the fact that the student is different today from earlier. The student has facility for independent thinking, is spontaneous and adopts things fast and he/she has different styles of learning. On the other hand, there are students who expect that the teacher is on hand teaching and guiding. As all students are different as to their needs and capabilities to learn, the teacher should be able to guide each student in his/her own zone of close-development. A student-centered learning in the REPRO-model is a kind of quality promise to meet students' personal requirements. It can be asked a question: How should the teacher be different in regard to a student? SCL emphasizes the student's needs, individuality and co-working. The implementation of the REPRO-model emphasizes the teacher's competence on the levels of an individual, a community and an organization.

#### **3.1 Strengthening the Teacher's Competence**

Problems that partly aggravate the utilisation of the RePro-project's good practices (see testing report) and their dissemination for wider use have to be investigated more profoundly. Teachers' competence is not yet on the adequate level in all partner institutes. Teachers' competence in the REPRO-model has been criticized especially:

- because of the lack of evaluation skills, this includes both evaluation methods and criteria
- because of the lack of learning agreement skill
- because of the lack of reflective practice skills and
- because of the lack of meaningful feedback.

In regard to these capabilities, the manual directions can be checked later. However, it is not possible to provide the manuals with very detailed instructions, because the manuals might get quite useless like “bricks”, which would have little value as guidance. In different cultures, the evaluation of learning and competence, feedback and reflective practice differ perhaps most from each other’s practices, which explains the fact that it has not been easy to write down these things unambiguously into a common manual. Training teachers to competence-based evaluation would bring an opportunity to evaluate once more the applicability of the REPRO-model even more widely to curricula and to the structures of degree programmes.

In connection with teachers’ competence it has also been brought out a question of teachers’ collaborative skills and their importance in the REPRO-model. Case-working including several subjects requires teachers’ seamless cooperation both at planning, implementation and evaluation stages. The teachers’ cooperation has to be examined on several levels:

- RePro-teachers and other teachers/instructors of the degree programme
- teachers and students
- teachers, students and companies’ representatives.

During the RePro-project the pedagogic responsibilities for development was mainly on the shoulders of those teachers who were devoted to the project. Hence, it is understandable that cooperation functionality has to be examined somehow as an internal function in the institute. It is still to be seen that teachers act flexibly in external networks, but fairly traditionally inside their own organisation. This kind of model to operate is an obstacle to the dissemination of the innovations developed over the networks to individual teachers’ own organisation. Also creating and maintaining corporate cooperation seems to be teachers’ and institutes’ job. How is it possible to promote the image of institutes so that companies would be more initiative when looking for a partner from institutes? The companies, it is true, traditionally look for partners who would bring mutual benefit

### **3.2 The Importance of Information and Reporting**

Another factor that makes the dissemination of the project difficult in one's own organisation is the lack of information about the REPRO-model. This affects quite strongly the fact how willing teachers outside the project are to implement the model. Although the manuals guide teachers' work and REPRO-model's orientation, teachers have a fairly high threshold to start to carry out an operational method which is strange to them. Lack of information about the model has hampered especially the understanding of case working and the building of cases. Further, lack of information makes it difficult to perceive which subjects are included in one case. In this context, a competence-based evaluation plan and a curriculum would increase understanding – provided that the curriculum is made on the basis of competence entities required in working life. Thus the teacher cannot any longer work only with his/her own subject or course.

### **3.3 "Positive Attitude to RePro"**

The teachers and instructors who are not involved in the RePro-project constitute the most important resource when disseminating good practices. That's why more time should be spent on their motivation. It has been established that motivation for implementing a new way of action varies in organisations. Lack of information as mentioned previously is no doubt one of the biggest obstacles when examining the level of motivation towards the REPRO-model. However, increasing information is not adequate alone to establish the use of the way of action among the teaching staff. Co-working - team teaching creates at its best an experience of the functionality of the model and integration of various subjects. A company-based case gives a good picture of the competence that is needed in working life. Some representatives of institutes may have difficulties even fear to cooperate with companies or enter into companies. A desire to keep old structures, materials and models create a sense of security and stability, which is human and understandable. But new concepts of teaching and new innovations do not emerge in this kind of climate, but it is needed courage, openness and creativity – what entrepreneurship and entrepreneurial operations call for.

New ideas in teachers' collaboration emerge and are processed and refined into a new way of action only when the community allows risks always involved in experiments as well as possible failures. Trust and openness as well as learning together are the basic elements of a learning organisation, and if these are missing from cooperation, new ideas and methods often remain only as a property of "inventors". If it is not customary to the teacher community to evaluate one's own action and handle e.g. student feedback generally, the REPRO-model cannot be recommended as the first joint target of planning, implementation, evaluation and development!

### 3.4 Organisational Factors

The first obstacle when introducing new ways of action is said to be lack of time and other resources. These so-called organisational factors should be taken into consideration also on the management level. Reconciling new pedagogy with the old one requires a lot of work, flexibility, creativity, and the company-oriented and student-centered REPRO-model, and theory-based teaching strictly tied to the timetable and classroom cannot be implemented at the same time by the same teacher. To solve this dilemma, it is essential to consider structural elements of the entire degree programme if they want to develop a new kind of pedagogic model further.

Structural elements include, among other things, all the things that are related to resources and leadership. The joint planning of teaching requires more time as well as the development of teaching. Various cultures in the RePro-project have naturally different practices to allocate resources but the scarcity of time has been common to all parties. More time would have been needed for learning new things, for building cases, for joint planning and for independent planning. The management's support or the lack of it has shown, e.g. in the fact that more resources have been allocated to so-called traditional forms of implementation than to the operations carried out by the REPRO-model. The size of the student group is one outcome of allocating resources – but is the size of the group significant at all in the REPRO-model, because the basic idea of the model is a student-centered approach?

As to the multicultural element of the project it is important to note that those working on various development projects should not be left alone with their own project, but organisations should create an operations model about how new models and innovations are included in other operations. It is also decisive how teacher communities in general take care of the dissemination of information and the production of common new information. As appeared before, teachers' teamwork is one opportunity to take colleagues outside the project to the new operation. Teacher-teams should consist of people with diversified competences and skills. It is necessary to study teacher-teams and wider communities from the perspective of participants' roles, i.e. what kind of roles the participants can take in the development work, everybody cannot have

and it is not even expedient to have a similar commitment. This fact is closely related to pedagogic leadership and development. When organising teachers' work it would be good to use as many different models as possible.

## **4 RECOMMENDATIONS FOR MEASURES TO BE TAKEN**

### **4.1 Alone or together?**

The importance of manuals for the initiation of new teachers should be considered according to each organisation, because every organisation has its own methods for self-developing and for developing the organisation. It is advisable to keep the manuals in a simple and short form so that they would serve as tools in everybody's own work. The basic concepts related to the REPRO-model should be crystallized and the context between the concepts should be clarified.

The teacher's profession and work have always involved a certain independence and autonomy. Compared with this tradition, strict manual-driven teaching is a very contradictory phenomenon. In order to clear up this contradictory situation every teacher community has to carry on discussions about how much the teacher has a right to act as a possessor of his/her own expertise and, on the other hand, to what extent the teacher is obliged to participate in the production and dissemination of common information. According to the researcher (Sahlberg 1996), the importance of individuality grows along with collectivity.

The collective creation and dissemination of information in the RePro-project has worked well with the help of continuous conversation and working together. The multicultural background and differences in the education system and pedagogy have become more familiar in the course of the project. It would also be a good idea to create a joint forum for this peer learning, which would evaluate the good practices that were not included in the RePro-project but which became familiar in informal conversations. Every member of the project got, if wanted, a good picture of the pedagogy and ways of action of



other countries, and handling and modelling them together would have been valuable as well.

## **4.2 Dissemination of Results**

Good practices obtained from the RePro-project will be disseminated from the perspective of the distribution and creation of information as follows:

- distribution of information: will be told to colleagues and those who are interested on the web, by lectures
- creation of information: colleague(s) and joint ventures are invited to work together, to teamwork and wider cooperation.

On the basis of evaluation and feedback information, informing about the RePro-project and the dissemination of the new model should be started from one's own work community and organisation. This lays a solid foundation on the new way of action. It is likely that the newly created REPRO-model will change its form in some parts owing to the fact that it will be established into other operations of the company. After this it would be good to visit other collaborating institutes at home as well as partner institutes (bench learning). Dissemination over the Internet is at its best a channel for releasing the results of the RePro-project. Contact information on the Internet and a feedback portal allow the RePro-project's further processing. It is recommendable to have various combinations of contact and interaction consisting of face-to-face meetings and Internet-based forums. It is up to the project how meetings are placed to the various stages of the projects. If it is about an international project that creates and develops something new, it is advisable to spend enough time on face-to-face meetings at the early stage of the project so that it would be possible to create the required concepts, ways of action and rules together for the cooperation: this produces a common reference frame.

## **4.3 Pedagogy**

In the RePro-project the cases and testing their functionality and feasibility have been the focus of development. That's why it could be assured that the working-life-oriented approach of the model has been particularly successful in this project. The student-centered learning (SCL) and its manifestation did not come out clearly in the evaluation and feedback discussions, whereas the group and its importance (group guidance, peer support, peer evaluation) has been examined. In the future, it is worth examining what an individual student learns about the group and working in the group. This is how a student's so-called metacognitive skills can be promoted.

The REPRO-model challenges to develop competence-based curricula, which is relatively easy in situations where there is a lot of information about working life together with its competence requirements. Learning, guiding and teaching by the REPRO-model is a wider whole of things than case working and student-centered learning. At its best, it has an impact on the implementation of the entire pedagogy and its common development. Common development, however, should be supported by a leader who has vision and skill to perceive this whole widely, the REPRO-model only contributes to it partly at the moment. In this context it is only a question of pedagogic leadership.

## **5 AFTER THE PROJECT**

### **5.1 RePro-Project's Future**

The importance of the RePro-project to the development of higher education is indisputable. It has convinced with its functionality and results of the importance of three things: working-life-oriented, student-centered and multicultural elements. So that these three cornerstones could be refined in future it is important to increase teachers' cooperation in so far as it is in the interest of the implementing country. The pedagogy of higher education can be developed best in cooperation with the experts who work on it – evaluating this work together and developing it together.

Various parties' views of the benefits of the project are according to the testing reports as follows:

1. Generally RePro cases were successful.
2. RePro approach includes elements which improve both teaching and learning
3. REPRO-model discloses to teachers and students many crucial things and situations in a learning process.
4. REPRO-model combines school and real life, which is in many ways positive from the learning point of view.
5. RePro manuals are basically good. Only some improvements are needed.

The teachers who were involved in the project see that the future of the REPRO-model is built on flexibility, creativity and integration. Flexibility is obtainable with the cooperation of students, teachers and the representatives of working life. This cooperation also calls for flexibility! Creativity constantly produces new solutions and creativity is needed to find new approaches. Integration challenges to produce and build national and international information.

### **5.2 Evaluation in Development Projects**

The RePro-project was a three-year project, which consisted of participants from various operational cultures and environments, which is typical of devel-

opment projects. In this kind of project, the objectives are formed during the process and the operations have to be directed in a new way. This is what happened to the RePro-project, too. For this reason the formative assessment during the process was adopted even more widely. It helped re-direct objectives and action. The self-evaluation of the process contributed to the participants' learning in regard to their own work. The evaluation of action during the development process and toward the end of it can be called reflective evaluation (e.g. evaluation seminar in Busto Arsizio, 2-4-5-2007). This reflective expertise can emerge at its best from the cooperation of experts, where extensive and versatile views are searched with polyphony.

As the qualitative evaluation has become more general it has meant that evaluation has begun to emphasize the importance of various interest groups both in planning the evaluation process and in collecting and utilizing information. The project evaluation is often focused on the evaluation of the achieved objectives and aims – and not on the evaluation of development work. When evaluating the long-term influence of the development project it is to be considered that innovative development and production of new information cannot be punctilious aiming at the pre-set targets. If we knew beforehand, what we should know, there would be no sense developing. Innovative development projects involve setting relatively extensive and ambitious targets and goals just for the foregoing reasons. It is possible during the development process to make original targets meet realistic action and so that the ideas and findings can be taken into consideration during the process, it would be essential to provide the development processes with continuous, internal evaluation. In addition to the products and outcome of the project this would ensure on its part the development of reflective expertise.

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This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.