

**RePro
Project**

Real-Life Business Projects in
Multicultural Student Centered Learning



STUDENT'S MANUAL



Education and Culture

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Procedure B, Second phase: 2000–2006, Pilot project

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1. Introduction

This manual has been produced to support your assessment using Real Life Business Projects (RePro). The RePro model is designed to support your knowledge and understanding in the current business environment, as well as contribute to your personal self development in terms of teamwork, project management, research skills and negotiation.

Your Role as a student within RePro

Learning is very individual, the use of the RePro model, based on progressive learning, had some key generic benefits namely to:

- Support skills in knowledge creation
- Understand current business activities and developments
- Improve problem solving skills

As such you should be prepared to work in a team and:

- Understand key business issues
- Bring knowledge and experience to the team
- Contribute to discussions and do a fair share of the workload

The manual provides key study skills support In order to complete your RePro successfully in the following areas:

- Investigation skills
- Team roles
- Project management
- Assessment criteria
- Recording sources/referencing

If this is the first time that you are using the RePro model you may find it useful to review the following explanation and review **Figure 1** which follows the explanation in order to understand your own role in the entire process. There is an opportunity to answer further questions in the introduction of your course.

1.1. What is the RePro-model?

RePro stands for **Real-life Problems** that the industry world experiences and this model gives the student(s) the opportunity to reflect on and reconstruct the lived experience from the industry world in the classroom. The RePro-model involves three parties: **students, teachers/tutors and RePro-companies.**

Actual “live” research is conducted through visits, interviews and other forms of investigation on cases that you will be exploring. This type of learning is centred focused on supporting the way students learn and the term used to describe this type of learning is Student Centred Learning. In this Student

Centred Learning, we view learning as a process that requires active engagement from the student's part. It is important to understand the basis which the **RePro-model** functions, namely:

Student Engagement: In the learning process, the students' role is to construct knowledge themselves. No one else can learn on behalf of any other person; that is why learning requires a great amount of individual work. During this process the previous knowledge and experiences will be very valuable.

Learning Environment: In learning situations, the information and knowledge acquired means that students are interacting with their teachers, with relevant industry professionals and the REPRO-case study companies. Students are supported and given expert guidance (tutors, professionals) during the whole learning process.

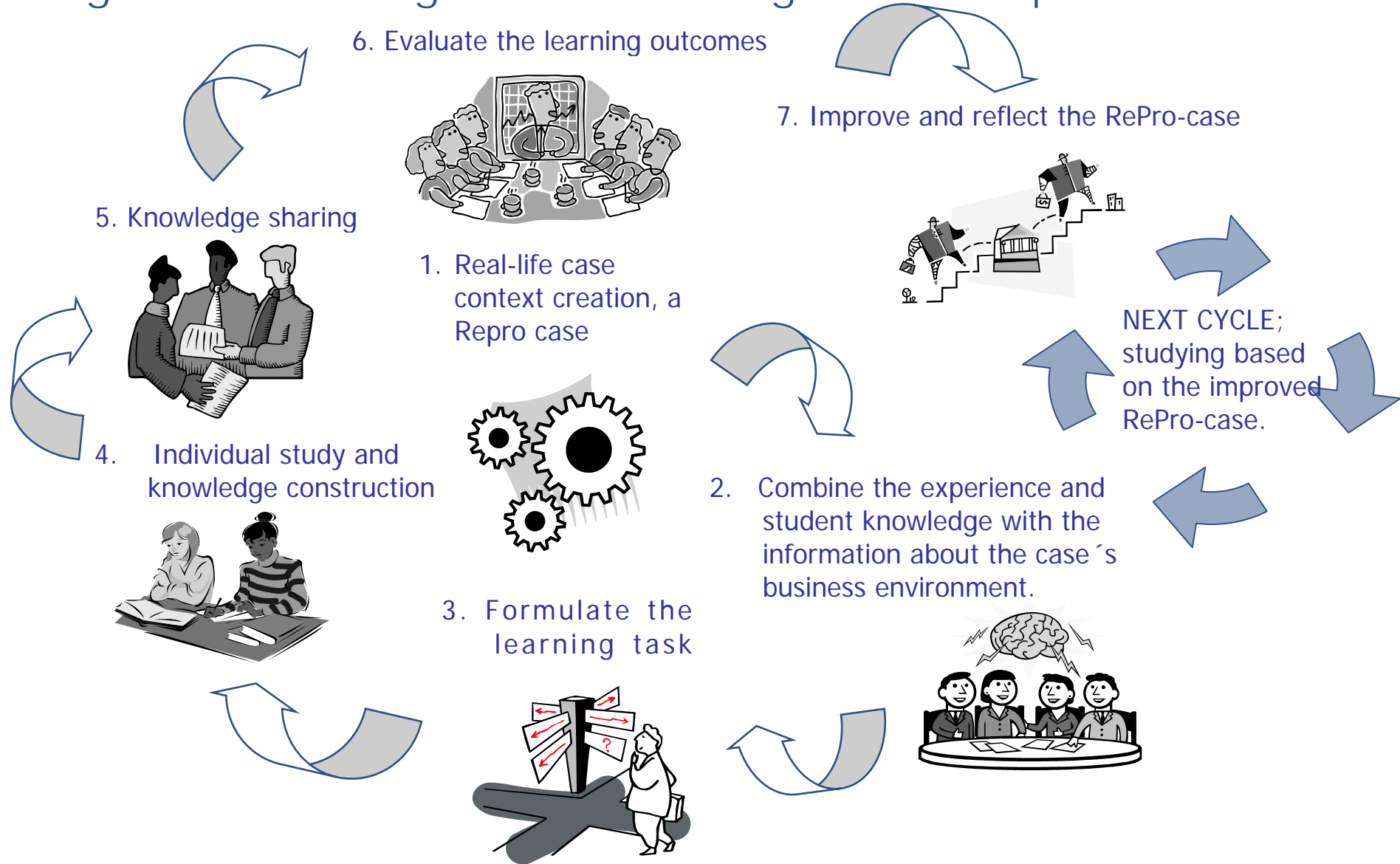
Interactive Real Life Context: Interaction, this means learning through interactive dialogue by asking and finding knowledge, together with other learners within a group. The real life learning will be possible, when active and independent students solve problems together, share ideas, analyse their own thinking and background knowledge, seek for practical and theoretical knowledge and construct their personal knowledge and understanding.

Problem Solving in a Creative Manner: Activating student's motivation and thinking ability by using intellectually challenging and interesting learning tasks (based on real case stories), not subject-centred exercises.

Learning as a Continuous Process: Students are guided towards reviewing how they learn e.g., what do I want to learn? What did I learn? How did I succeed in it? What will I do differently next time? Students are encouraged to reflect on their own learning activities and process, because this is one further way to improve the depth of their learning rather than engaging in short-term activities and exams.

Figure 1 illustrates a **step-by-step process (1-7)** on how the RePro-model can be implemented.

Figure 1: The Progressive Learning Model adapted in RePro



Source; Modified Hakkarainen, Lonka, Lipponen, 1999; 2004.

1. Real-Life Case Context Creation

You will be:

- Introduced to the RePro model
- Introduced to the Real Life Business project(s)
- Introduced to the course content

2. Combination of Student Experience and knowledge with the information about the Case's Business Environment (Branch etc)

You will:

- Engage in discussions about the RePro Company
- Gain a more in-depth understanding of particular RePro Company environment
- Review key interests and themes drawn out of the RePro Company case(s)

Tip! Refer glossary and resources section at the end of the manual.

3. Formulation of the Learning Task(s)

You will:

- Negotiate your learning tasks based on your activities in stage 2
- Formulate a 'learning agreement' with your tutor and team colleagues that is mutually agreeable.

Tip! Learning agreement is in appendix and look up the terms assessment and assessment criteria in the glossary and resources section at the end of the manual.

4. Individual Study and Knowledge Constructing

You will:

- Be asked individually or in a group to read and evaluate background literature
- To collect information directly, with necessary permission, from your RePro organisations where possible

5. Knowledge Sharing

You will be required to:

- Share findings e.g. research results
- Engage in discussions as a team/panel using effective oral mediums such as role plays and presentations

6. Evaluation of Learning Outcomes

- Learning outcomes will be assessed using criteria agreed upon and provided when the learning tasks were created.

7. Reflect on and Improve the RePro-Case – Closing the RePro Loop

- Feedback from your tutors and other members of your presentation audience will enable you to make appropriate reflection and make further improvements on your RePro work
- In order to complete your RePro successfully you need to take time to review the following skills (listed in the introduction) which go hand in hand with the overall management of your project.

2. Negotiating the RePro Learning Agreement

2.1. What is a Learning Agreement?

A learning agreement is a formal agreement between a learner and the person who is helping/guiding them to learn. This agreement is to be negotiated between the student and the teacher and it is about what is to be learned, how it is going to be learned and how that learning will be evidenced and assessed.

The role of the teacher

One of the 'key' words in the above definition is the word 'negotiation'. This process of negotiation normally starts with some discussion about the roles and responsibilities of each party. Ultimately the student is responsible for completing the agreed activities and the teacher for offering the necessary guidance and ensuring that the course requirements are met.

Although the responsibility for the completion of the project rests with the student, during their *progress meetings*, the teacher will have to maintain a clear balance between guidance and support (help). The exact level of support rather than guidance will be determined by the level of the student and by the institution's regulations. The progress meetings aim at a dialogue that will enable the student to reflect on their progress, the method they are following and the learning they gain. Ideally, in a progress meeting the teacher will be the one asking questions (much like Socrates did with his students) that will help the student reflect and find their way to the answer.

Another balance that needs to be maintained is the one between the 'student ownership' of the project and the teacher's responsibility to monitor that the agreed learning is indeed under development. In other words, teachers should not interfere at all with the way the student handles the project up to the point where they are convinced that the student is not heading to their agreed target.

Generally the teacher's role at this stage is to:

- provide an overview of the learning agreement process
- offer guidance by providing and stimulating ideas and suggestions about possible learning outcomes

- negotiate the contract by challenging learners' ideas, conforming the institution's academic requirements, suggesting relevant resources and informing the student of non-negotiable criteria
- providing reassurance, encouragement and support
- monitor student progress in planned progress meetings
- re-negotiate the agreement, if needed

The role of the student

Students will be generally not used to taking so much responsibility in the design of their learning and will probably be unfamiliar with skills such as writing learning objectives and planning learning strategies.

This is why active attendance of *orientation workshops* that will be organised on learning agreements is essential.

After these workshops and before meeting their teacher for the agreement students have to prepare themselves' well and draft a proposed agreement with as clear as possible outcomes, strategies and assessment criteria. The teachers will be there to assist them but an unprepared or undecided student will be a great hindrance to the overall project.

Students need to be in control of their own learning and act accordingly.

2.2. Steps in Developing a RePro Learning Agreement

Step1: A set of relevant learning needs has to be established

Whether these will be established by the student or the teacher depends on the level of the course and its specific requirements.

Step2: The learning needs have to become specific learning outcomes

Each need or interest has to be 'translated' into a SMART (Specific, Measurable, Attainable, Realistic and Timed) learning target. For example:

- Specific – what is the outcome?
- Measurable – Until when does this have to be achieved or completed?
- Attainable – Are the learning outcomes achievable?
- Realistic – How appropriate are the learning outcomes in relation to the type of RePro case/Company?
- Timed – Is the work achievable in the given time frame?

See project management tip on page 10.

Step 3: Identify specific learning strategies and resources

For each of the agreed learning outcomes, the student has to state how exactly it will be accomplished and provide a list of resources that will be used towards that end. The level of ongoing supervision as well as the number and format of progress meetings will be agreed now.

Step 4: Determine what is to be produced

This may be determined by the formal requirements of the course but there will be a need to consider the appropriateness of the evidence to the original learning outcome (see Appendix C – Fifty assessment techniques).

Step 5: Determine the criteria for assessment

This is the step about the expected quality standards of the evidence to be produced. It is often recommended that the work will also be peer-assessed (by other students) as well as self-assessed (by the student who produced it). See Appendix 2 – Sample Assessment Criteria

Step 6: Review the learning agreement

A few days after the initial completion of a draft agreement a second meeting takes place for its formal signing. These few days will allow the student re-think the feasibility of the agreement before committing to it.

Step 7: Carry out the agreement

The student works on the agreement. Progress meetings take place according to what is agreed in step 3.

Step 8: Self-assess and submit the completed work

As agreed in step 5. Peer assessment (if part of the agreement) will also take place at this step.

2.3. The Learning Agreement Form

The proposed format for the RePro learning agreement is offered in the next page; however, institutions are free to modify it according to their own requirements. However, the elements that are essential in this type of agreement are the following:

- *Learning Outcomes*, which will state what specifically the student will learn or be able to do as a result of studying the RePro case.
- *Learning Activities*, a quite detailed analysis of the actions, strategies and resources that the student will engage with in order to achieve these outcomes.
- *Evidence of Learning*, which will be presented to the teacher as a result of these activities.
- *Assessment of Learning* or the method and the criteria that will be used to assess this evidence.

Assessment Criteria

Assessment and criteria go together. It is very important to spend time reading and understanding the criteria for your RePro assessment. The criteria tell you what is expected of you and what you will be marked on.

Practical Tips

- Do think carefully about the specified criteria for presenting your work e.g. effective oral presentation; word count
- Do check carefully when deadlines are and aim to finish earlier than the stated deadline
- Do make sure that everyone in the team understand clearly what the criteria mean, it is worth having a discussion about this to check that no-one is completely miss-informed

Suggestions for a successful investigation of the project:

- Have you identified the main learning objectives and outcomes for your assessment?
- Have you identified which skills the assessment is designed to develop and/or assess?
- Do you know what form the assessment is likely to take (e.g. diary, portfolio, and report)?
- Do you know the deadline for submission of the assessment?
- Do you understand the criteria by which the assessment submission will be judged?
- Does your assessment meet all the criteria set e.g. word count, font size, appendices e.t.c?

Payne E, and Whittaker L, (2006), Developing Essential study Skills 2nd edition: page 273

Timing of the project for successful completion

As with every type of agreement, a *due date* will be necessary. Students will be required to provide a research time plan clearly indicating exactly how long the different stages will take from the moment the agreement is signed till the completion of the project and the submission of the evidence(s) of learning... This is to be used as a guide and informs the teacher what is happening and is a useful basis for conducting progress meetings.

Project Management

Although tutors are there to provide initial guidance, support and facilitate the RePro teams, the management and completion of the final assessment is up to you and your team colleagues.

Practical Tips

- Meet regularly
- Give feedback on progress to your tutor on a regular basis
- Arrive prepared for all meetings
- Keep up with the assigned tasks
- Plan to complete assessment ahead of time
- Produce a time-plan for your investigation

Suggested Outline linked to RePro Model:

- Project initiation
 - learning agreement
- Analysis of the current situation
 - organisation's business environment
- Defining objectives/outcomes that the team and tutor agree to
 - these should be SMART (Specific, measurable, Achievable, Realistic and Timeframe should be considered)
- Progressing the Project
 - Involves your individual input as well as team input in gathering and analysing information concerning the project organisation

Parker C and Stone B, (2003), developing Management Skills for Leadership, prentice Hall Financial Times

Teacher's comments/ Learner's notes

Often the teacher will want to write a few comments or even suggestions on the agreement. Similarly the student may wish to write a few notes or points that were raised during the negotiation. This can be done in a separate section that can be provided with a different formatting of the agreement (or quite simply on a separate page).

Changes in the agreement

In the case that the original agreement needs to be renegotiated, modifications can be made and signed during the subsequent progress meetings. In keeping with the spirit of the RePro approach, all changes will have to be agreed by both parties.

LEARNING AGREEMENT

Name: _____ Student Number: _____

Field of Study: _____

Contact details: _____

**Semester in which RePro Study
is to be undertaken** (please circle one): 1 2

**Date by which the RePro Study
Project is to be submitted:**/..... /20..

1. **Learning Outcomes**

Please describe the learning outcomes of your study. At the end of this period of RePro study I shall be able to:

- a)
- b)
- c)
- d)

2. **Learning Activities**

Please describe what you intend to do to achieve each of the learning outcomes above.

(Learning Agreement cont'd)

3. Resources

Please describe the resources or particular access to people or information which will be required to achieve your proposed learning outcomes.

4. Evidence of Achievement

What evidence will be available to demonstrate that you have achieved the learning outcomes of your study? E.g., written documents, demonstrations, presentations etc

5. Assessment Criteria

What assessment criteria will be appropriate in judging your achievements?

Learning Outcome	Assessment Criteria
a)	
b)	
c)	
d)	

6. Assessment

How will the learning outcomes of your study be assessed? E.g., assessment of written documents, observation of presentations or demonstrations etc

Learning Outcome	Assessment Method
a)	
b)	
c)	
d)	

NB

- a) All students will attend an assessment interview.
- b) In the case of group work all students will receive the same grade unless a case for a different distribution is made to me in writing at the time of submission of evidence of achievements.

Signature of Student _____

Date

Signature of Course Teacher _____

Date _____

3. Collecting Information for Businesses

3.1. The Concept of Information

The analysis of case studies requires from student gaining additional information, because the delivered material is just the beginning for further work and activities. **"Information"** one of the basic conceptions in the present world, however there is no universally recognized definition of it. Data, which have been processed, interpreted and understood by recipients, are information. Also essential, introduced in useful form facts will be informative. Knowledge, increase of knowledge and understanding facts, which are useful for recipients of information are information. Information is notification about facts, events, phenomena, characteristics of objects.

Recording Sources / References

Practical Tips

- Check with your tutor/librarian which referencing style is being used in your university/college in particular when using internet/web sources
- When gathering data make sure you record where you saw the information, date of information, and author(s)
- Provide a bibliography to validate the information presented
- Follow your university/college rules for referencing tables and charts appropriately

Suggestions for a successful investigation of the project:

- You need to collate information from a variety of sources, typically (trade journals, databases, newspapers, the organisation itself, organisation website)
- Try not to repeat what the sources report but aim to understand the implications for your RePro organisation
- Valid points that are significant to your analysis should ideally be validated by more than one source to offer a stronger justification of your analysis

3.2. Credibility of Information

The rightness of undertaken decisions, efficiency of analyses and scientific research depends strongly on information quality. Credible information is essential to undertake a decision. Credibility of information means “level of adequate reflection of objectively existing issue, processes or economic events”. Credibility incorporates the most essential features of information from practical point of view. The information is actually valuable, if it contributes to improvement of rightness of undertaken decisions. The credibility of information depends also on the reliability of its source.

Students will usually use external sources of information, especially when the analysis requires wide context. Gaining information from the case study organizations might be relatively difficult. The task is usually easier in the case of large organizations, which often publicize parts of their internal information. It is a lot harder in the case of smaller organizations which usually tend not to disclose their financial results. It is also important to make sure that process of information collection is not causing any inconvenience for the participating businesses. Therefore, every measure should be taken to limit student visits to the minimum necessary. A well organized visit with all the details on information that is needed and questions to be asked carefully planned in advance will be of great help. This will be greatly appreciated by the company contacts and will continue to support the RePro tasks.

Investigation Skills

Practical Tips

- A good investigation reflects in the quality of the final product
- Provide plenty of time to collect background information
- Do not underestimate the time needed to collect data e.g. primary data, designing questionnaires and analysis
- Before writing up the report, stop and think!
‘What are the assessment criteria for the RePro?’

Suggestions for a successful investigation of the project:

- A sound logical structure
- Arguments should be clear and to the point
- The evidence provided should be clearly stated
- Make clear how your research is being used and where
- Be critical of the concepts, theories or models being considered in relation to the data
- Provide continuity by making significant links between the sections (brief introductions and summaries of sections helps)
- Use tables, graphs and charts where appropriate to enhance presentation of the data
- Give due considerations to the limitations of your research findings
- Be consistent and thorough in the development and analysis of the RePro material
- As the project is based on an organisation make sure it meets the learning tasks set and do not let the organisation drive the project

Payne E, and Whittaker L, (2006), Developing Essential study Skills 2nd edition: page 363

3.3. Important Issues Regarding Using Primary and Secondary Data

Primary data and first hand information are useful in special situations requiring quick problem solving. Therefore we are often forced to collect primary data. This requires from both students and teachers familiarity with skills to collect such data: observation and interviews or surveys. Analyzing these data collection techniques are beyond the scope of this manual. Readers interested in finding more may look at research methods books (some sources are proposed in the end of this manual).

3.4. Where to Look for Secondary Information

Students have to gain over necessary information to find solution for a problem during analyzing of concrete case studies. Secondary information will be probably mostly used according to their advantages. Some of these sources are introduced below:

1. Basic information and data used in case study analysis may be found at governmental statistic agencies in every country. These institutions publish studies with statistics in print form and online in their websites (e.g., <http://www.stat.gov.pl/english/index.htm>; http://www.stat.fi/index_en.html; <http://www.csb.lv/avidus.cfm>). There might be delays in case of hard copies connected with period of accumulating data, handling, as well as publishing period. The international centers function in similar way, such as

Euro stat - the institution responsible for accumulating and disseminating statistical information relating to all countries of European Union (<http://epp.eurostat.ec.europa.eu>).

2. The different financial institutions, which accumulate various data about financial markets, economy of individual countries or regions, can be good source of information. The most popular international institutions of this kind are: World Bank (<http://www.worldbank.org/>), European Bank Reconstruction and Development (<http://www.ebrd.org/>) or the International Monetary Fund (<http://www.imf.org/>). The financial institutions act also in every country. They are central banks, which are responsible for monetary policy of individual states. They are Bundesbank (<http://www.bundesbank.de>) in case of Germany and Banca di Italia (<http://www.bancaditalia.it>) in case of Italy.
3. The similar category of information sources are stock exchange, which publish stock quotations, public noted companies' annual reports, prospectus for stock issue and general economic studies in paper and electronic form. Stock exchange in London (<http://www.londonstockexchange.com>) ranks among the largest stock exchanges. World Federation of the Exchanges (<http://www.world-exchanges.org>) and Federation of the European Securities Exchanges (<http://www.fese.be>) are in the same the group of information sources.
4. Public administration is relatively reliable source of information. Proper ministries are popular source of data. The information available from finance (e.g. Finnish department of finances: <http://www.vm.fi>), economy, agriculture or natural environment department (e.g. Latvian department of natural environment: <http://www.varam.gov.lv>) might be useful for the purpose of analysis of individual cases studies. There are more different institutions besides departments of public administration. The office of competition and consumers protection in Poland (<http://www.uokik.gov.pl>) is an example. It deals with problems of competition. Local administration might be also useful in information gathering.
5. International organizations, which publish the data in reference to world, individual regions and countries in different form, are often used as information sources. The most important of these institution are:
 - Organization for Economic Co-operation and Development - www.oecd.org
 - Club of Rome - www.clubofrome.org
 - United Nations – www.un.org
 - Greenpeace - <http://www.greenpeace.org/international>
6. Students can seek some information in different commercial organizations. They are commercial banks, stockbroker offices; research institutes (e.g. Gallup Institute <http://poll.gallup.com>). The necessity of payment for majority of this information is a strong disadvantage.

7. Trade/branch and economic organizations are next group of information sources. They often publish current concrete trade information and also general economic data on their internet web sides. The example of such organization in case of shipping industry is CESA (Community of European Shipyards Associations www.cesa-shipbuilding.org).
8. Excellent sources of information are books and periodicals. It is possible to use them through networks of libraries of libraries (the National Library in Poland possesses the greatest resource <http://www.bn.org.pl>) or internet publishers' web sides. The last one refers to periodicals which have today their electronic version apart from traditional paper form (e.g. www.economist.com). Students and teachers can search over 300 periodicals, journals, and newswires simultaneously for industry information at <http://www.findarticles.com/> and <http://www.magportal.com/>.
9. Information is accumulated also by different media - e.g. CNN possesses its own rich databases (www.cnn.com; www.bbc.co.uk).
10. Financial information for publicly listed companies may be obtained from "Yahoo! Finance" (<http://biz.yahoo.com/>), which pulls together such resources as Reuters, PR Newswire, Business wire, and Market Guide. Similarly another good source of such information is the website "Daily Stocks" (<http://www.dailystocks.com/>) which offers links to extensive company information including stock quotes, profiles, charts, news, SEC filings, and articles. "Yahoo Quotes" (<http://finance.yahoo.com/>) allows searching for multiple stock quotes simultaneously and displays the results in chart providing a quick comparison of stock prices for a number of companies/competitors.
11. If you are looking for information about and industry sector, at <http://biz.yahoo.com/industry> one can check industry press releases and current news whereas at <http://www.corporateinformation.com/> one can find links to industry resources in over 30 sectors.
12. Finally, for non-profit organizations there is a wealth of sources such as <http://www.guidestar.org/> which provides a searchable directory of nonprofit organizations and the Internet Nonprofit Center (<http://www.idealists.org/>) offers a library of information about nonprofit organizations, a searchable directory of organizations, discussion forums, and links to other websites of interest. Also the more generic About.com provides links to a large number of nonprofit-related websites: <http://nonprofit.about.com/index.htm> .

Further Information

The information provided in this manual is intended as a supportive guide only. It is important to be able to research other sources to promote your learning. Therefore the following books are recommended as essential reading in addition to books that your tutors may draw specific attention to in the course introduction.

Suggestions for further reading:

- Payne Elaine and Whittaker Lesley, (2006), *Developing Essential Study Skills*, 2nd edition, Prentice Hall, Financial Times
- Parker Chris and Stone Brian, (2003), *Developing Management Skills for Leadership*, Prentice Hall, Financial Times
- Jaques D, (2000), *Learning in groups: A Handbook for Improving Groupwork*, 3rd edition, Kogan Page

4. Working with Groups

Group Work/Team Roles

You will inevitably find yourself working in a team for your project. It may even be a multicultural team. In order to be an effective RePro team you need to think about how you can contribute constructively within your team.

Practical Tips

- Identify what tasks you are good at e.g Co-ordinating, note-taking, chairing
- You need to be culturally sensitive and treat colleagues the way you would want to be treated
- Listen to other team members to get the benefit of shared ideas

Suggestions for a successful investigation of the project:

- Clarify and agree **what** aim(s) to be achieved as a team
- Make sure **everyone** in the team is committed to the aim(s)
- Determine **what** needs to be done to achieve the aim(s)
- Decide **how** this will be achieved, who will do what
- Agree on how will decisions be made and conflicts resolved
- Identify how performance will be monitored
- Discussions can be improved by:
 - seeking clarification from tutors and colleagues if you don't understand
 - clarifying the impact of new material – does it confirm challenge or develop points made in the project
 - provide or expand using examples from your own experience

Payne E, and Whittaker L, (2006), Developing Essential study Skills 2nd edition: page 232

4.1. The Forming of a Group – Practical Aspects

Size

The maximum size of a group should be four to five. To avoid idleness, teachers need to be aware that the less experienced the students are or the less time is available for a task, the smaller the groups should be.

Homogeneity/Heterogeneity

The more heterogeneous a group is, the more creative it can be, but the higher grade of heterogeneity is also linked with more problems in cooperation and coordination. So it is also advisable to consider the following points:

- professional background knowledge of students
- cultural background of students, e.g. national and / or international students
- gender, etc.

Decision on group forming

There are different ways to decide how groups will be formed:

- self-selected by the students, which is advantageous if you have small classes, where students already know each other;
- pre-selected by the teacher, according to background of students, students levels (e.g. students of different semesters or grades vs. passed/not passed students), work habits, former grades, gender, etc.;
- students can express preferences, the final allocation can be made by the teacher;

4.2. Group Member Roles

In an effective group a number of crucial functions must be performed by group members. If these functions are not performed then the group will drift aimlessly without getting much done. The group needs to decide who is going

to perform these roles, which do not have to be fixed for the whole duration of the RePro project. The roles that can be considered at various stages are the following:

Co-ordinator

A group needs a co-ordinator, or at least someone who will chair meetings. This person has the responsibility for clarifying the aims of a meeting, its agenda, for introducing each topic and for summarising discussions and decisions.

Secretary or note-taker

A group needs someone to take notes in meetings, to keep a record of what has been decided, who is doing what, when the next meetings are and so on. This person should produce an outline set of notes after the meeting and copy it to each member of the team.

Progress chaser

A group needs someone to chase progress - to see if everyone is doing what they are supposed to and that all the jobs that need doing by a particular time are on schedule. This person has work to do between meetings and should report on progress at the start of each meeting.

Time-keeper

In meetings groups will have a limited amount of time but a lot to do. Unless they are careful they may use up all their time on the first few things and not get the rest done. They will need to watch the time carefully and divide it up between their tasks. The timekeeper's responsibility is simply to make sure everyone is aware of how long they have got and when this time has run out.

Appendices

Appendix 1: Fifty Assessment Techniques

Source: Knight, P.T. (2002) *Being a teacher in higher education*. Buckingham: SRHE and Open University Press

1. Artefacts/ products, especially in fashion, design, engineering, etc.	11. Defence of lab records.
2. Assessment as gatekeeping: students gain entry to classes only on production of bullet point summaries etc	12. Design and build (similar to 2 above).
3. Assessment banks. Students have access to a question & answer bank. They learn how to answer all of them but assessed on a sample	13. Dissertations and theses
4. Assessment of work-based learning (in a variety of ways, many times, by a variety of people, for different purposes).	14. Electronic monitoring of web searches, program use & communications.
5. Book, website or program reviews	15. Essay writing - one 5000 word, piece (make harder/easier by varying amount of tutorial guidance, range of reading expected, novelty of the topic/problem, time available, conceptual complexity, etc.).
6. Classroom assessment techniques. They are brief tasks that tell the teacher something about the class's grasp of the material.	16. Essays writing - 2 x 2500 word pieces.
7. Completing structured summaries of readings, debates etc.	17. Exhibitions of work, posters, products.
8. Computer-based self-assessment	18. Field work and lab work assessment (traditional and well established).
9. Concept maps. Excellent way of seeing how students understand complex content and relationships.	19. Formative assessment of logs/journals/portfolios (when the purposes are formative, students identify areas for discussion. If summative, sampling within the logs etc. is recommended, especially if students know in advance the areas that are likely to get closest attention).
10. Contribution to threaded electronic discussions.	20. Games and simulations

(Continued)

<p>21. 'General' assessments, drawing together learning in several modules.</p>	<p>31. Personal response assessments. Usually done in classes where each student has an electronic response pad. Teachers ask questions and they press a key to show their answer. Can be used for classroom assessment or test purposes.</p>
<p>22. Making annotated bibliographies for next year's students.</p>	<p>32. Posters.</p>
<p>23. Making models (literally, in some subjects, conceptual models in others)</p>	<p>33. Production of structured logs of project dissertation progress and reflection on it.</p>
<p>24. Multiple choice questions (they do not have to be only tests of information, although it is a lot quicker to write MCOs like that. See also 3, above)</p>	<p>34. Projects.</p>
<p>25. New tests in which learners use old software/programmes/notes.</p>	<p>35. 'Real' problem working, which involves defining 'fuzzy' situations, bringing some order to ill-defined issues, analysing the problem and suggesting solutions.</p>
<p>26. Objective Structured Clinical Examination (OSCE).</p>	<p>36. Replication of published inquiries.</p>
<p>27. Open-book, end of course exams.</p>	<p>37. Role-playing.</p>
<p>28. Orals and vivas.</p>	<p>38. Self-assessment. Skill at self-evaluation is valued by many employers, which is a reason for having self-assessments. Easiest when used formatively.</p>
<p>29. Peer assessment. Some try to use it summatively but it's a lot easier if done for formative purposes.</p>	<p>39. Seminar presentations (in or out of role; with or without use of video, OHT, PowerPoint, etc.).</p>
<p>30. Performances. Vital in the assessment of competence. Note massive problems assessing complex performances fairly and reliably. Simulations sometimes possible.</p>	<p>40. Short answer questions. (MCOs plus some explanation of the thinking; limit to 100 words per response?)</p>

(Continued)

41. [Short] appraisals of target papers.	46. Terminal, unseen examinations and other individual time-constrained assignments
42. Small-scale research or enquiry.	47. Two part assessments. Elements of a task are formatively assessed but the final product is summatively assessed.
43. Statements of relevance, which are short pieces of writing, 1000 words, perhaps, making claims about the relevance of a workshop, article, field observation etc. to another task or activity.	48. Web page creation.
44. Submission of claims to achievement with reference to portfolio (if this is to be summative, I suggest grading on the claim alone provided that sufficient evidence supports the claims).	49. Writing exams / tests/ assessments to tutor specification.
45. Takeaway papers/questions/tests.	50. Writing memoranda or journalistic summaries.

Appendix 2 – Sample Assessment Criteria

Grade	Marking Criteria
A	Evidence of effective self managed and autonomous learning, using a wide range of sources of theory, information and data which has been critically evaluated to give new insights in conclusions and recommendations, is presented through written documents, presentations, demonstrations or other previously agreed methods. Evidence indicates dept and/or breadth of knowledge, and/or skills and capabilities developed to a high level of competence.
B	Evidence of effective self managed learning, using a range of sources of theory, information and data which has been critically evaluated to support appropriate conclusions and recommendations, is presented through written documents, presentations, demonstrations or other previously agreed methods. Evidence indicates depth and/or breadth of knowledge and competence in skills or capabilities demonstrated.
C	Evidence of self managed learning, using appropriate sources of theory, information and data which has been evaluated to support appropriate conclusions and recommendations, is presented through documents, presentations, demonstrations or other methods previously agreed. Evidence indicates appropriate knowledge in the subject area and the development of skills or capabilities.
D	Evidence of self managed learning, using limited sources of theory, information and data which has been evaluated to support limited conclusions and recommendations, is presented through documents, presentations or demonstrations. Evidence indicates limited knowledge of the subject area and limited skills or capability development.

Glossary of Key Terms

N.B. Please note that the following website provides a full glossary of useful academic terms used in higher education teaching and learning <http://www.heacademy.ac.uk/2287.htm#S>

Assessment criteria –	details of what standards teachers will be looking for when they mark your assessments according to different categories such as A, B, C, D or in percentage terms e.g. 50% or 100%
Formative assessment -	assessment aimed at determining a person's strengths and weaknesses with the objective of improving them. Generally expressed in words rather than grades, and generally not used in the final assessment.
Learning agreement -	A learning agreement is a formal agreement between a learner and the person who is helping/guiding them to learn. This agreement is to be negotiated between the student and the teacher and it is about what is to be learned, how it is going to be learned and how that learning will be evidenced and assessed.
Learning contract -	agreement by which the learner agrees on a number of objectives that s/he must have achieved by the end of the learning period.
Peer assessment -	Assessment undertaken by a fellow (peer) student or fellow professional in the discipline
Repro model -	the RePro-model combines educational problems and real business problems by connecting students, teachers and RePro-companies' stories into the same learning cycle. A tool which is central to this approach is the RePro case .
Student Centred Learning -	Ways of thinking about learning and teaching that emphasise student responsibility for such activities as planning learning, interacting with teachers and other students, researching, and assessing learning.

Summative assessment -

Assessment generally taking place at the end of a course and leading to the attribution of a grade or a mark to the learner, which will allow the learner to move to the next part of the course, or which completes the course.

Edited from Payne E and Whittaker L, (2006), Developing essential Study Skills, 2nd edition, Prentice Hall & <http://www.heacademy.ac.uk/2287.htm#S>

Sources

N.B. For free registration of international higher education e-journal
<http://www.hlst.heacademy.ac.uk/johlste/about.html> -

Assessment

<http://www.hlst.ltsn.ac.uk/resources/cases/assess.html> - useful range of case studies on a variety of assessment methods

Assessment Criteria

<http://www.hlst.heacademy.ac.uk/guide/assessment/a05c.pdf> - assessment criteria example

Case studies

<http://www.materials.ac.uk/guides/casestudies.asp> - Guide to using case studies

<http://www.hlst.heacademy.ac.uk/resources/cases/case73.html>

Feedback

http://www.heacademy.ac.uk/resources.asp?process=full_record§ion=generic&id=353 – formative feedback

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Gross Davis, B. (1993) *Collaborative Learning: Group Work and Study Teams*, from the hard copy book by Barbara Gross Davis *Tools for Teaching* San Francisco Jossey-Bass Publishers, available online:

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Learning Agreement & Learning contract

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Reflective practice

<http://escalate.ac.uk/3571> - reflective practice guide

Atherton, J. S. (2005). *Learning and Teaching: Reflection and Reflective Practice*. Available On-line:

<http://www.learningandteaching.info/learning/reflecti.htm>

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<http://www.magportal.com/>

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www.un.org

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Student Centred Learning

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Education and Culture

Leonardo da Vinci

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