Collaborative Open Environment for Project Centered Learning

Modelling the Virtual Company Educational Scenario Competence Assessment in the Cooper environment

Howard Spoelstra,
Vlad Posea,
Jan van Bruggen,
Rob Koper

Cooper Workshop, Crete 17-09-2007

Information Society Technologies

Virtual Company educational scenario and compentence assessment

Virtual Company educational scenario

-working and learning environment modelled after real company

-students work on projects in a professional setting

-compentences to be developed stem from professional practice

-assessment derived from professional practice

Virtual Company educational scenario and compentence assessment

Assessment strategies

Traditional:

-separates process from product
-learning is individual
-objective, value free, neutral
-assume knowledge universal
-separates cognitive from affective abilities

Competence assessment:

-process as important as product
-develop competence in groups
-knowledge embedded in person
-knowledge related to context
-more holistic view of the learner

Main competence list

Group 1: Research
1.1.1 Identifying problems and formulating the research question
1.2.1 Determine methods and techniques
1.3.1 Gathering data
1.4.1 Process data and analyse
1.5.1 Drawing conclusions and evaluating

Group 2: Reporting
2.1.1 Verbal reporting
2.1.2 Reporting in writing
2.1.3 Editing
2.1.4 Presenting

Group 3: Discussion en collaboration
3.1.1 Chairing a meeting
3.1.2 Taking minutes
3.2.1 Collaboration

Group 4: Communication
4.1.1 Acting customer centred
4.1.2 Maintaining external contacts
4.2.1 Communicating inside and outside of the company
4.2.2 Managing company knowledge

Group 5 Supervision of activities
5.1.1 Leading a group
5.1.2 leading individuals
5.2.1 Planning and organising
5.2.2 Guarding progress
5.3.1 Coaching a fellow worker

Group 6 Personal additions
6.x.x <proposal for additional competencies>

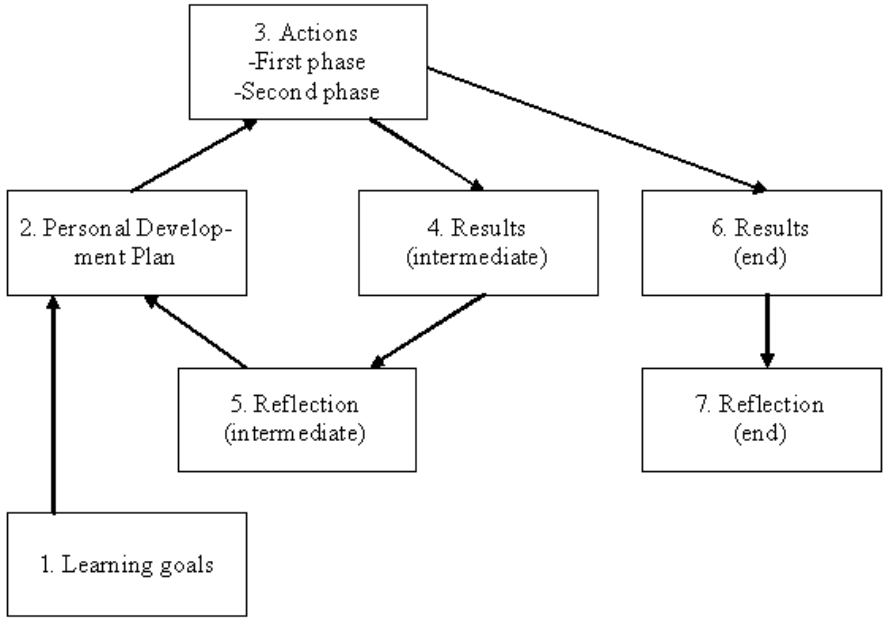
Competence

Name: Research	Description	Points of interest for assessors
1.1 Identifying problems and formulating the research question.	Stipulates the problem from the task, splits it up in sub-problems or aspects, specifies domains that the problem is related to, names the relevant stakeholders. Describes the problem in a larger framework, with relevant references to similar problems. Verifies with the client if the problem has been described correctly and fully. Formulates the research questions and splits these up in sub-questions. Verifies with the client if the research questions have been correctly and entirely described.	1. Examines the task and stipulates the problem in consultation with the customer 2. Differentiates between main and side-issues 3. Classifies the problem in several aspects/sub-problems 4. Clearly states to which field the different (sub)problems are related 5. Provides a clear and complete problem description, based on obtained information. 6. Describes the problem in a larger framework 7. Describes availability of background information. 8. Names relevant stakeholders 9. Defines relevant research questions and splits these up in sub-questions 10. Verifies research questions with the customer

Virtual Company educational scenario and compentence assessment

Working in Projects (1 of 2)

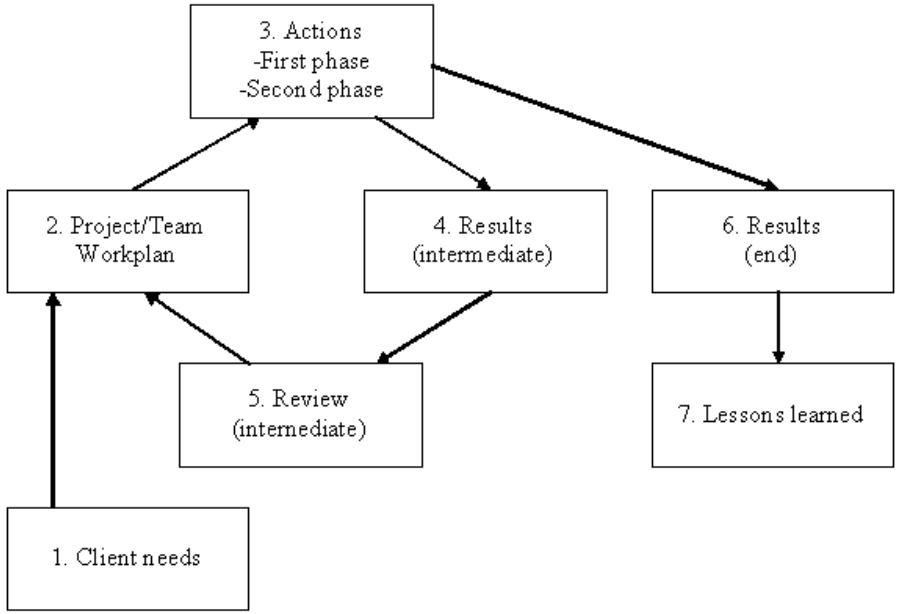
-Personal development cycle



Virtual Company educational scenario and compentence assessment

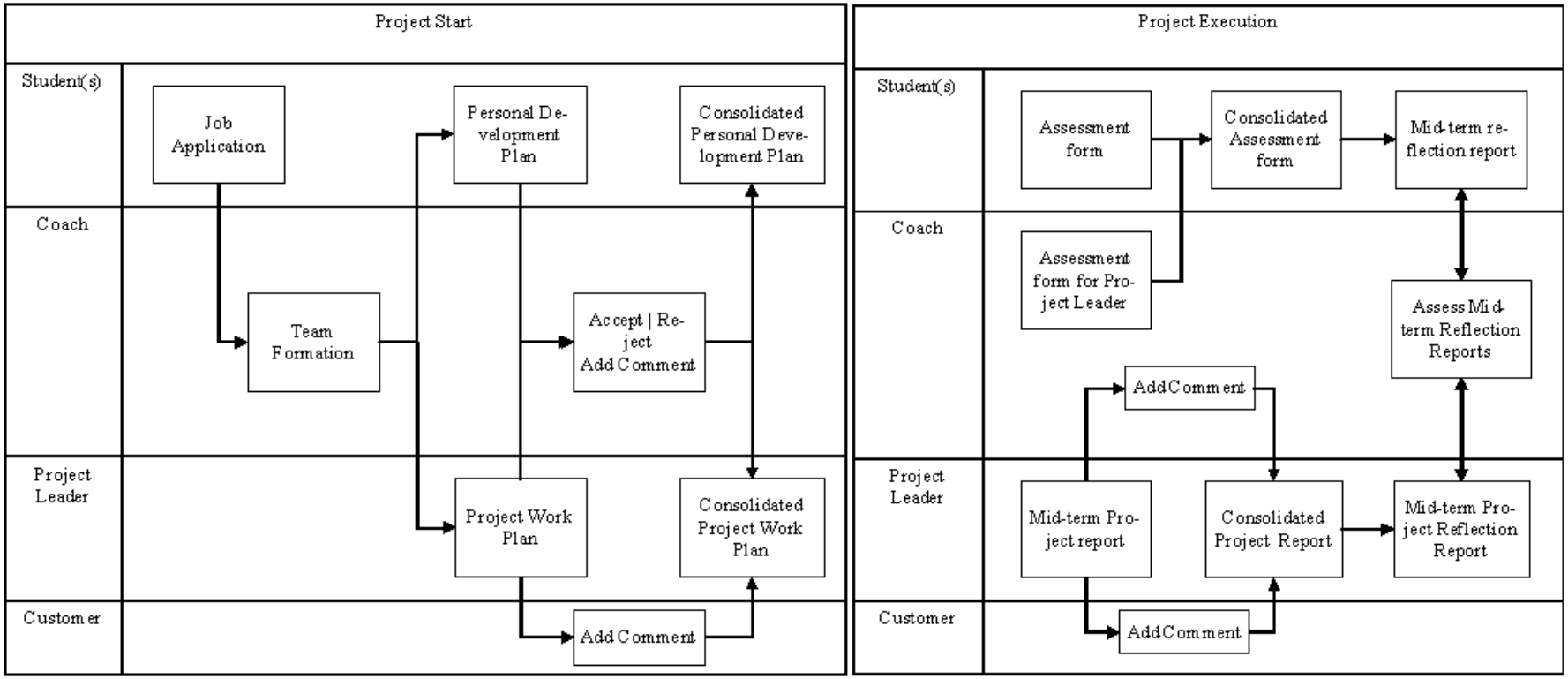
Working in Projects (2 of 2)

-Team development cycle



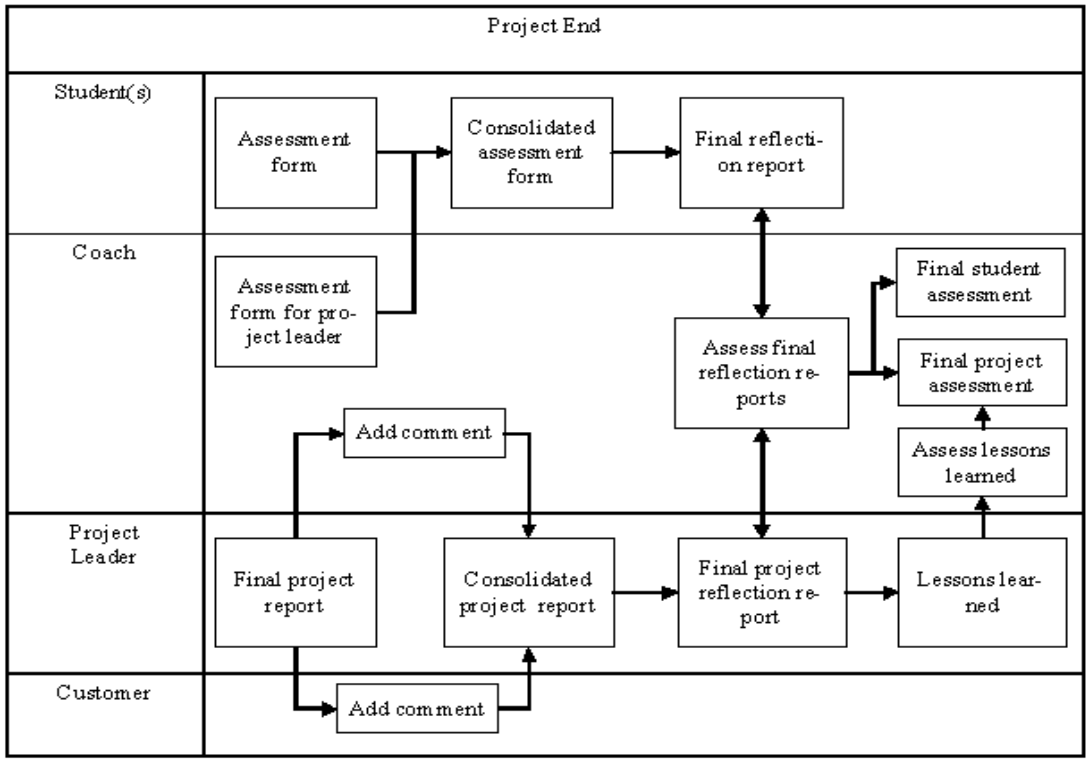
Virtual Company educational scenario and compentence assessment

Assessment model (1 of 2)



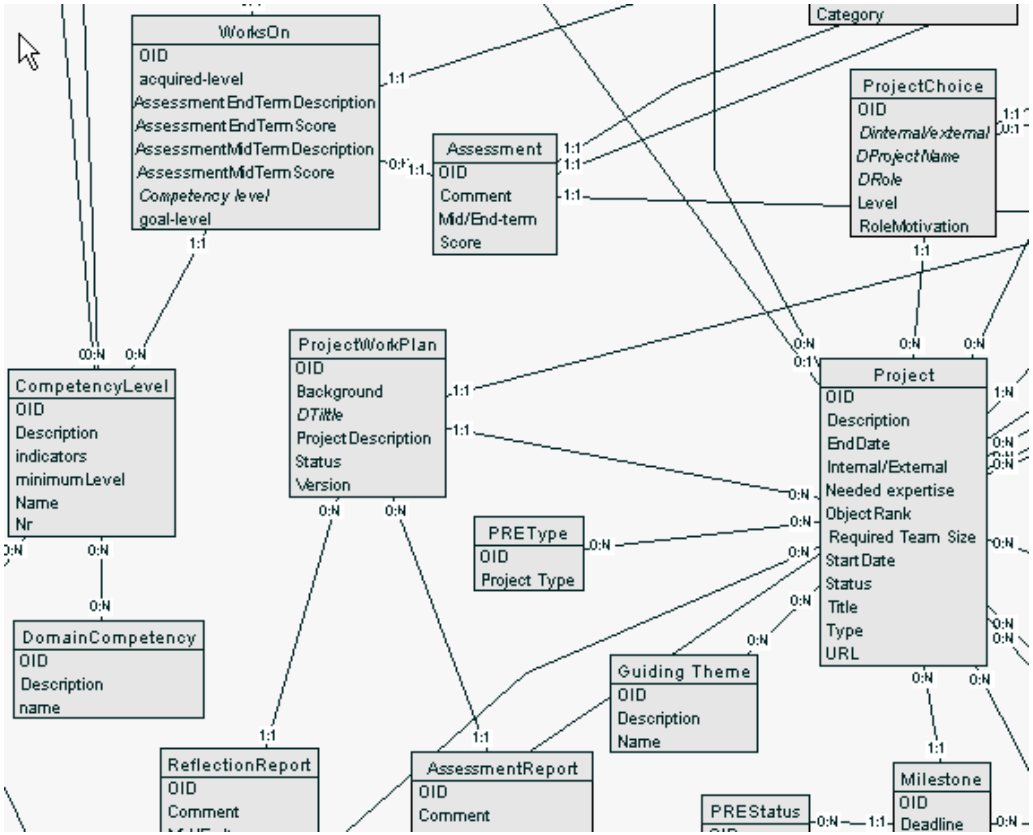
Virtual Company educational scenario and compentence assessment

Assessment model (2 of 2)



Virtual Company educational scenario and compentence assessment

Data model extension



Virtual Company educational scenario and compentence assessment

Conclusions

-The virtual company educational scenario requires non-traditional assessment strategies

-The assessment strategy can be modeled using the Cooper development tools, although not all processing occurs inside the Cooper platform

-Testing is needed for usability and validation of the model