OBA Projects Sharing Session:

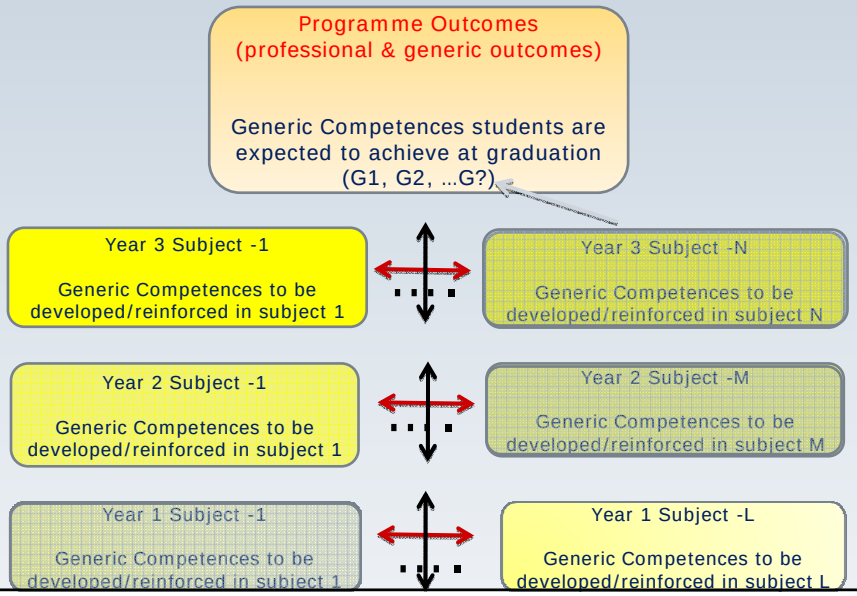
Assessing Student Generic Programme Outcomes with Final Year Projects

Prof. Esmond Mok (LSGI)
Feb 3, 2009

The Project

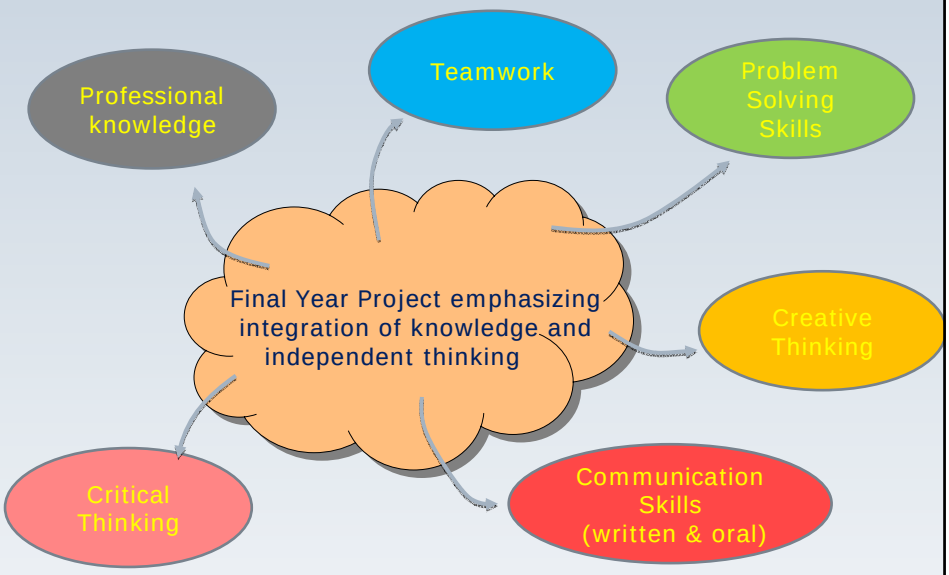
- One of the projects on promoting outcome-based approaches in student learning
- Faculty-wide project
- Start date: 1st July, 2008
- Expected completion date : 30th June, 2010

General Structure of an Outcome Based Curriculum



How to evaluate whether students have attained the intended generic learning outcomes at graduation ?

What learning outcomes can students demonstrate in the process and presentation of final year project(s) ?



Aims of the project

1. to design and develop a mechanism to assess student generic programme outcomes with final year projects in the four FCLU departments

2. to evaluate the effectiveness of the assessment mechanism

Two Stages of the Project

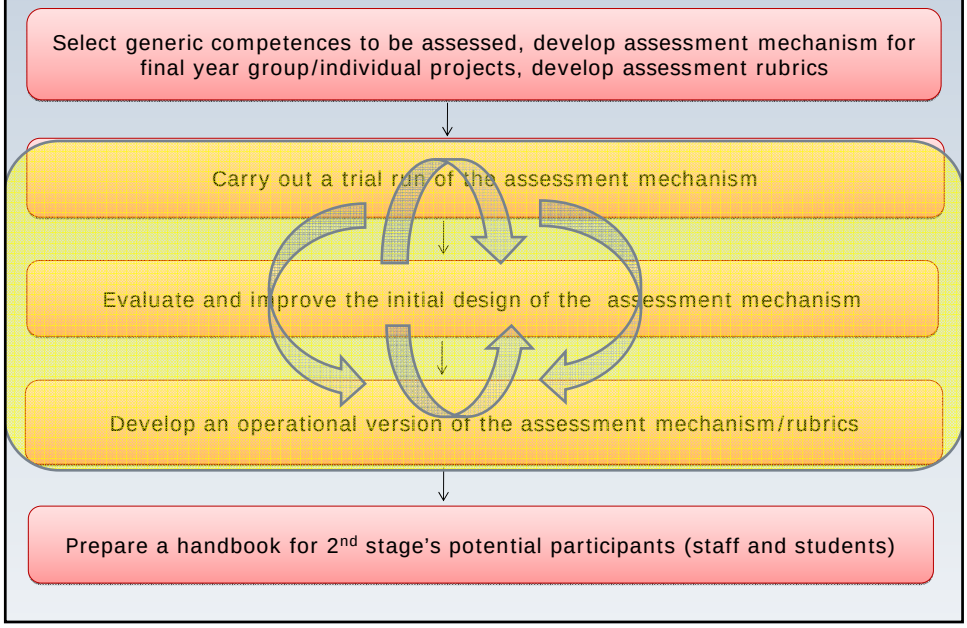
FIRST STAGE:
(Development)

12 Months
Development of a mechanism to assess student generic programme outcomes

SECOND STAGE:
(Operation & Evaluation)

12 Months
Operation and evaluation on the effectiveness of the mechanism

FIRST STAGE



SECOND STAGE

Send invitation to students and teachers of BRE, BSE, CSE and LSGI

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Operate the assessment mechanism in group/individual projects

↓

Collect assessment results at the end of semester one/two 2009/10

↓

Collect feedbacks from teachers and students

↓

Evaluate the effectiveness of the assessment mechanism, revamp the mechanism for future implementation, and disseminate results to parties interested in assessing student generic outcomes

What have been done so far ?

FIRST STAGE

Identify generic competences to be assessed √

- August 2008:

Discussion with SAO (Ms. Winnie Lee and her team)
Discussion with EDC (Dr. Patrick Lai and his team)

Assessment of five generic outcomes selected:

(i) critical thinking
(ii) creative thinking
(iii) problem solving
(iv) communication
(v) teamwork #

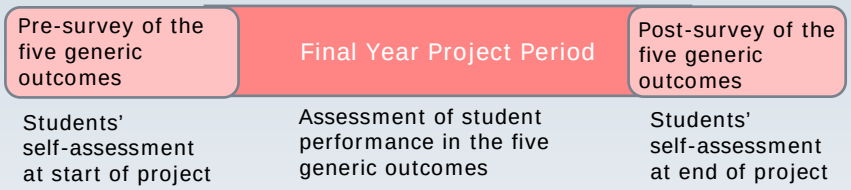
Outcome (v) can only be assessed in group projects

FIRST STAGE

Develop assessment mechanism for final year group/individual projects √

- September 2008:

Design and development of assessment mechanism



Pre- and post- survey would enable us to understand students' perception on the generic competences, and the difference between students' perception and assessment results

FIRST STAGE

Develop assessment mechanism for final year group/individual projects √

Pre- and Post- surveys:

Adoption of self-evaluation form developed by SAO under the e-Portfolio Project

Definition of the Self-Evaluation Areas

Communication

It refers to the ability to apply oral and writing skills to communicate clearly, concisely (簡要地), and effectively with others. Oral communication includes listening and understanding, and speaking appropriately in words, tone and style to convey messages to the audience. Written communications include reading and understanding, and writing documents clearly and appropriately in various formats and language styles with the additional use of illustrations (e.g. charts, figures, tables, graphs, etc.)

Creative thinking

It refers to the ability to use one's imagination (想像力) freely to generate new ideas. It is the ability to discover and apply new and useful angles, ideas, and methods to understand and manage any deal with routine matters.

Critical thinking
It refers to the ability to identify and interpret (確定及解釋) problems, to state strong reasons/evidences to support a given argument, to analyze arguments, to make conclusions, and to identify illogical reasoning in similar situations.

Problem solving
It refers to the ability to identify problems, set goals, plan and find strategies to solve them successfully and effectively.

Teamwork – Teamwork refers to the willingness to support team decisions; and the ability to exchange information about work in a timely (即時的) manner; maintain openness to information, ideas, and feelings of others (including negative ones); create and maintain an atmosphere that fosters (促進) open communication; and effectively manage and resolve conflicts (解決分歧).

Example of Student Self-Evaluation Form

Teamwork Q1-4

Please click the answer that best describes you.

1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Usually, 5 = Always

When working in teams, …

		1	2	3	4	5
Supporting team decisions – Willing to follow the team's agreed decisions.						
1.	I am willing to take up the job responsibilities (職責) assigned to me.	O	O	O	O	O
2.	I monitor my progress (監察自己的進度) toward meeting team goals.	O	O	O	O	O
Sharing information – Being able to acquire, organize and transmit task relevant information efficiently (有效率地取得、組織、及傳達與工作有關的資料).						
3.	I try to summarize latest, task relevant information (總結與工作有關之最新資料) into concise (精簡的) reports/messages.	O	O	O	O	O
4.	I share latest, task relevant reports/messages (與工作有關之最新報告/訊息) with team members using the most efficient channels (最快的渠道).	O	O	O	O	O

statements addressing various domains of a generic competence

Teamwork Q5-10

Openness to disagreement (不同意見) and criticisms (批評) – Being open and receptive (包容) to negative comments and/or feelings of team members.

5. I try to consider criticisms or counter proposals from the perspectives of team members (嘗試從隊員的角度去細想其批評或反建議).
6. I ensure that criticisms (批評) or counter proposals (反建議) are discussed and not ignored (不被忽略).

Supportive communication style – Being able to maintain an atmosphere that fosters (促進)open communication.

7. I listen accurately to team members' ideas first before making any judgment.
8. I focus on solving specific problems rather than evaluating (評價) individual team members during meetings.

Resolving conflicts (解決分歧) – Being able to manage and resolve conflicts effectively.

9. I try to develop creative solutions (有創意的解決方案) which satisfy both sides during conflicts.
10. I try to learn different kinds of resolution approaches/techniques (解決方

Critical Thinking Q1-6

1 = Poor, 2 = Below average, 3 =Average, 4 = Well, 5 = Very well

When facing a task to complete or a problem to solve,

	1	2	3	4	5
Interpretation – The formulation of hypotheses (設定) and assumptions (假設)					
1. I identify (確定) and clarify the meaning of various sources of information, e.g. statements, graphics, questions, data, etc.	O	O	O	O	O
2. I use the identified information as evidences (證據) to formulate my own hypotheses and/or assumptions.	O	O	O	O	O
Analysis – The identification (確定) of different arguments (論點)					
3. I identify the pros and cons (贊成與反對) of different arguments.	O	O	O	O	O
4. I analyze the facts by comparing and contrasting (比較與對比) different arguments.	O	O	O	O	O
Evaluation – The assessment (評估) of the quality of evidence					
5. I examine the credibility (可信性) and accuracy (準確性) of the evidence.	O	O	O	O	O
6. I consider the influence of context[1] (背景的影響) on the arguments.	O	O	O	O	O

Critical Thinking Q7-12

Inference – Forming conclusion						
7.	I suspend or postpone (暫緩或延遲) my judgment (判斷) until I have thoroughly considered the evidence.	O	O	O	O	O
8.	I draw reasonable (合理的) and valid (有效的) conclusions from evidence.	O	O	O	O	O
Explanation – The justification (辨証) of views with reasons						
9.	I justify the conclusions with the stated (陳述的) evidences.	O	O	O	O	O
10.	I explain the conclusions with logical (合邏輯的) reasons.	O	O	O	O	O
Self-regulation – The self-consciousness (自我意識) of monitoring (監察) thinking skills						
11.	I stay open-minded (開明/能夠接受) to reasons and different points of views.	O	O	O	O	O
12.	I correct the illogical reasoning (不合邏輯的解釋) whenever needed (當有需要的時候).	O	O	O	O	O

FIRST STAGE

Develop assessment mechanism with final year group/individual projects √

Assessment of the Selected Generic Outcomes - two formats of assessments classified:

- Assessments based on students performance/participation in the process, through observations in project meetings
- Assessments based on presentations and submissions, e.g. oral presentation (oral communication), project proposal, intermediate and final dissertation submissions (written communication, critical thinking, problem solving)

FIRST STAGE

Develop assessment rubrics √

September- October 2008:

Development of Assessment Rubrics

- Rubrics have been developed with the assistance of Dr. Patrick Lai (EDC) and his team

Oral Communication skills rubric

Criteria	F	D	C	B	A
Organisation of presentation	Audience cannot understand presentation because there is no sequence of information.	Audience has difficulty following presentation because student jumps around.	Student presents information in logical sequence which audience can follow.	Student presents information in logical sequence which audience can follow, and introduces examples and links to engage the audience further.	Student presents information in logical, interesting sequence which audience can easily follow. Presentation is of the standard of a professional in this field.
Subject knowledge	Student does not have grasp of information; student cannot answer questions about subject.	Student is uncomfortable with information and is able to answer only rudimentary questions.	Student is at ease with expected answers to all questions, but fails to elaborate.	Student demonstrates full knowledge by answering all class questions with explanations and elaboration.	Student demonstrates more than required knowledge by answering all class questions with explanations and elaboration.
Graphics	Student uses superfluous graphics or no graphics.	Student occasionally uses graphics but they are not used to support text and presentation.	Student uses some graphics that relate to text and presentation, but has missed some opportunities to do this.	Student's graphics relate to text and presentation.	Student's graphics explain and reinforce screen text and presentation. Student demonstrates the ability to explain/interpret graphics in a professional manner.
Accuracy	Student's presentation has five or more spelling errors and/or grammatical errors.	Student's presentation has four spelling errors and/or grammatical errors.	Presentation has three misspellings and/or grammatical errors.	Presentation has no more than two misspellings and/or grammatical errors.	Presentation has no misspellings or grammatical errors.
Elocution	Student mumbles, pronounces terms incorrectly, and speaks too quietly for students in the back of class to hear.	Student's voice is low. Student incorrectly pronounces terms. Most audience members have difficulty hearing presentation.	Student's voice is unclear. Student pronounces some words incorrectly. Some audience members have difficulty hearing presentation.	Student's voice is clear. Student pronounces most words correctly. Most audience members can hear presentation.	Student uses a clear voice and correct, precise pronunciation of terms so that all audience members can hear presentation.

Ref.: Information Technology Evaluation Services, NC Department of Public Instruction (retrieved from the World Wide Web in Nov 2005) http://www.ncsu.edu/midlink/rub.pres.html

Written Communication rubric

Criteria	F	D	C	B	A
Conceptual Clarity	Not relevant or only vaguely relevant to topic.	Less than half the content relevant to the topic. Major issues not covered at all.	Majority of the content relevant to the topic but significant issues not covered.	Content consistently relevant to the topic and covers most key issues.	All content highly relevant to the topic and covers all key issues. Student also demonstrates ability to apply own interpretations of the concept/s.
Analysis	No analysis.	No analysis or demonstrates poor understanding.	Analysis demonstrates limited understanding.	Clear analysis demonstrates good understanding.	Thorough and clear analysis Demonstrates excellent understanding. Student also demonstrates ability to apply own interpretations of the analysis.
Structure and Development	No evidence of planned structure to the report. No sense of balance or emphasis given to ideas according to their importance.	Structure and plan only vaguely evident. Often inappropriate balance or emphasis given to ideas according to their importance.	Structure and plan of assignment apparent but development and emphasis inconsistent.	Assignment follows logical sequence. Demonstrates effective use of proportion and emphasis.	Assignment follows clear, logical sequence. Highly effective use of proportion and emphasis.
Grammar, Spelling, Presentation	Written English so poor as to be barely understandable. Many spelling mistakes. Very poor presentation.	Frequent problems with sentence construction. Frequent spelling and grammar errors.	Sentence construction generally correct. Some spelling and grammar errors. Written style wordy or repetitive. Acceptable presentation	Written style clear and effective. Consistent use of standard grammar and punctuation. Presentation is of a high quality.	Professional presentation throughout. No grammar or spelling mistakes.

Ref: Written Communication Toolkit developed by the Griffith University (Retrieved from the World Wide Web in Sept 2007)
http://www.griffith.edu.au/centre/gihe/griffith_graduate/toolkit/written/assess02.htm

Creative thinking rubric

Criteria	F	D	C	B	A
Preparation: "problem/objective finding"	No clear cut problem or objective identified	A problem identified but no or only vague objectives	A few problems stated clearly and a few objectives prioritized toward solution opportunities	Most relevant problems stated clearly and several objectives prioritized toward solution opportunities	All relevant problems stated clearly and multiple objectives prioritized toward solution opportunities
Incubation: "idea finding"	Not many ideas generated with little novelty or diversity	A few ideas generated with novelty or diversity	Good number of ideas but not overly novel or diverse	Some ideas of a diverse nature.	Many ideas of a diverse nature including student's own originality of thought
Verification: "acceptance finding" (idea is proven)	Not a successful solution	Minimally successful (needs significant modification or improvement)	Successful (only requires little modification or improvement)	Successful (requires no modification or improvement)	Highly successful solution (uniquely creative)
Flexibility: variety of ideas generated	All ideas serve the same basic function	Some of the ideas serve the same basic function	Ideas serve a few (1 or 2) functions	Ideas serve a few (2 or 3) functions	Ideas serve a wide variety of (more than 3) functions
Originality: novelty of ideas	Ideas are totally copies of existing ideas	Majority of the Ideas are modifications or improvements of existing concepts	Around half of the ideas are original but the rest are modifications or improvements of existing concepts	Most of the ideas are modifications or improvements of existing concepts	Ideas are totally new or even unique
Elaboration: articulation of ideas	Average person cannot even imagine it	Average person not understands the nature of it	Average person understands the nature of it with aided examples	Average person understands the nature of it	Average person can easily visualize it in his/her mind's "eye"

Ref.: Quoted from Martell, K. & Calderon, T. (Eds). (2005). Assessment of Student Learning in Business Schools: Best Practices Each Step of the Way. Florida: Association for Institutional Research.

Critical thinking rubric

Criteria	F	D	C	B	A
Identifies and summarizes the problem/question/work assignment	Does not attempt to or fails to identify and summarize accurately.	Summarises issue, though some aspects are incorrect or confused and key issues are neglected or glossed over Does not identify the purpose for questions that are asked. Poses extraneous or unimportant questions and does not distinguish between relevant and irrelevant questions.	Presents an adequate summary of the key issues but tends to be at a superficial level and does not identify any inter-relationships between the issues Poses questions that are mostly relevant, with only minor errors	Shows some understanding of the embedded or implicit aspects of the issue but does not fully identify integral relationships essential to analyzing the issue.	Clearly identifies the key issues, including embedded or implicit aspects of them. Identifies integral relationships essential to analyzing the issue. Identifies a depth and breadth of questions
Develops, and communicates OWN perspective, hypothesis or position	Presents points of view that are clearly unoriginal – taken from another source, not substantiated Articulates assumptions as fact Expresses unreasonable and/or invalid interpretations of statements	Presents a position or hypothesis with little original thought. Addresses a single source or view of the argument. Does not present or justify own opinion or hypothesis. Articulates others' viewpoints without understanding them fully	Includes some original thinking that acknowledges, refutes, systhesises or attends other assertions, although some aspects may have been taken from other sources and are not original. Presents some original points of view or hypotheses, although some may be inconsistent. Presents and justifies own point of view without addressing other views, or does so superficially.	Beginning to show evidence of constructing knowledge, posing original questions. Gives some indication of own position, but this is not backed up fully by support from other sources or only from assigned sources Presents and justifies own view or hypothesis and articulates some information against own opinion, but not consistently	Consistently constructs knowledge or frames original questions. Integrates objective analysis and intuition Appropriately expresses own opinion on the issue, drawing support from experience and from information from sources other than those assigned. Clearly presents and justifies own view or hypothesis while also discussing and integrating contrary views of interpretations Demonstrates sophisticated,

Criteria	F	D	C	B	A
					integrative thought Argument is developed clearly throughout
Integrates issue using OTHER (disciplinary) **perspectives and positions**.	Deals with a single perspective and fails to discuss others' perspectives Adopts a single idea or limited ideas with little question Treats other positions superficially or misrepresents them	Only a little evidence of taking account of others' views Presents more than one idea but they are not integrated Engages ideas that are obvious or agreeable, and avoids challenging or discomforting ideas No evidence of reflection or self-assessment	Shows some attempt to relate alternative views to qualify analysis – but dismisses these hastily Rough interaction of different viewpoints and some comparison of ideas or perspectives – but in a limited way	Analysis of other positions is thoughtful and mostly accurate Acknowledgement and integration of different ways of knowing. is emerging but not yet sophisticated Some evidence of reflection and/or self-assessment Analysis of other positions is accurate	Addresses others' perspectives and draws on additional outside information to qualify analysis Fully integrates perspectives from a variety of sources Integrates own and others' ideas in a complex process of judgement and justification. Clearly justifies own view while respecting views of others Integrates different ways of knowing in a sophisticated way Evidence of reflection and self-assessment
Identifies and assesses conclusions, implications, and consequences.	Fails to identify conclusions, implications or consequences Makes no inferences	Conclusion is a simplistic summary. Conclusions are presented as absolute and may be attributed to external authority Makes inferences that do not follow from the evidence presented Does not express alternative conclusions/solutions	Conclusion draws issues together in an appropriate way but only loosely relates them to consequences Implications include only vague reference to conclusions Applies relevant criteria to substantiate the logical conclusions but application may be	Conclusion draws issues together in an appropriate way but does not fully integrate ideas Presents implications that follow from the evidence but articulation is unclear Expresses some multiple logical alternative conclusions and	Identifies, discusses and extends conclusions, implications and consequences. Clearly expresses multiple logical and plausible alternative conclusions and solutions Asserts logical conclusions only when there is sufficient evidence to

Criteria	F	D	C	B	A
		or expresses illogical and/or implausible alternative conclusions/solutions Does not exhibit a complex, systematic or logical process of critical inquiry to construct solutions	unclear or imprecise	solutions, but misses some key ones	support them Conclusions are qualified as the best available evidence within the context. Consequences are integrated. Implications are developed clearly and follow logically from the evidence presented

Ref.: Guide to Rating Integrative and Critical Thinking, Washington State University (retrieved from the world wide wed in June 2008) http://wsuctproject.wsu.edu/ctr.htm

Problem-solving skills rubric

Criteria	F	D	C	B	A
Defining the Problem	Student does not identify the problem.	Student fails to define the problem adequately.	Student adequately defines the problem.	Student states the problem clearly and identifies underlying issues.	Student is able to define problem in a highly professional way, by looking at it from all possible points of view.
Developing a Plan to Solve the Problem	Student does not develop a coherent plan to solve the problem.	Student develops a marginal plan, and does not follow it to conclusion.	Student develops an adequate plan and follows it to conclusion.	Student develops a clear and concise plan to solve the problem, with alternative.	Student develops a unique and creative plan that will contribute new information about the problem.
Collecting and Analyzing Information	Student collects no viable information.	Student collects inadequate information to perform meaningful analyses.	Student collects adequate information and performs basic analyses.	Student collects information from multiple sources and analyzes the information in-depth.	Student collects information from multiple sources and analyzes the information in-depth, and adds an extra personal or creative touch to the analysis.
Interpreting Findings and Solving the Problem	Student does not interpret the findings/reach a conclusion.	Student provides an inadequate interpretation of the finding and does not derive a logical solution to the problem.	Student provides an adequate interpretation of the findings and solves the problem, but fails to provide alternatives.	Student provides a logical interpretation of the findings and clearly solves the problem, offering 1-2 alternative solutions	Student provides a logical interpretation of the findings and clearly solves the problem, offering alternative solutions at a professional level.

Ref.: Kelley, L. Course Embedded Assessment Process. University of Louisiana Monroe. (retrieved from the world wide web in June 2008) http://research.ccc.cccd.edu/SLOs_Instruction/Assment_embedded/embeddedassessment.doc

Rubric for team work (whole team performance)

Criteria	F	D	C	B	A
Group Functioning					
Attending	No team meetings are held. The work is all done by 1-2 members.	Many members frequently miss meetings and do not inform the team.	Most members are present at most meetings. When members have to be absent they inform and/or seek the agreement of the team.	Most, if not all, members attend all meetings.	Members take equal shares in the initiative to organize meetings and team tasks.
Participating	Tasks are not defined, and few members participate actively. There is no follow- up.	Tasks are defined informally, and not all members understand them. Only some members contribute. Follow-up is sporadic	All team members contribute at least one piece of work to the task, even though the final compilation is left to 1-2 people.	The leader allocates tasks to be done – all team members complete their tasks and most of the team contributes to the compilation of the final outcome.	There is a clear definition of tasks to be accomplished, anticipating future needs. All members take an active role. Tasks are defined by the group and assigned to all members. The team engages in follow-up activities to monitor progress.
Team Member Support	The team atmosphere is competitive and individualistic rather than cooperative and supportive.	There is a general atmosphere of respect for team members, but some members may not be heard as much as others. Acknowledging others' work is serendipitous rather than planned. Some members may not feel free to turn to others for help.	All team members are given a chance to express their ideas, and all receive help from other members if they ask for it.	Every team member is treated with respect. All members listen to all ideas. The work of each person is acknowledged. Members feel free to seek assistance from others or to ask questions.	All team members feel that their ideas have received maximum respect and maximum support.

Criteria	F	D	C	B	A
Process Management					
Establishing Goals	No goals set	Some goals but not formulated or documented.	Goals are established, but some may be too general or unquantifiable. Priorities may be unrealistic. Documentation may be incomplete.	Realistic goals are established and documented – most of these are met.	Realistic, prioritized, and measurable goals are agreed upon and documented.
Keeping Meeting Notes	No documentation is kept	Minutes are either nonexistent or sketchy, containing little beyond attendance lists.	Minutes summarizing attendance, discussion, and actions are written and distributed but not consistently. Some minutes are more complete than others.	Written minutes summarize attendance, discussions, and actions.	Written minutes summarize attendance, discussions, and actions. Minutes are distributed electronically within two days of the meeting
Adjusting	The team seems to be thrashing about. Activity plans (if they exist) are unfocused, and thus there is no ability to adjust and make corrections.	There is realization of the need for mid- course corrections but this comes too late to do anything to make the corrections.	The team can recognize unexpected problems and make adjustments to allow for these on at least one or two occasions.	The team can solve nearly all unexpected problems or changes of direction that arise in a timely and effective way	When working to achieve goals, the team is able to adjust plans as needs arise. There is a clear understanding of the nature of mid-course corrections and why they were needed.
Timely Submission of Work Assignments and Reports	Work assignments and reports are submitted inconsistently. The team is no self-motivated and needs constant chasing to get the work submitted.	Work assignments and reports are submitted but are sometimes late.	Work assignments and reports are submitted on the due date but there is evidence that they were put together in a hurry to meet the deadline	Team is self-motivated and can complete work assignments and reports in a timely manner without being reminded.	Team is self-motivated and shows clear evidence that work was completed ahead of the submission time to allow for a professional product to be prepared in a timely way

Other Criteria developed by departments to be incorporated in the rubrics design ????

Assessment Criteria Developed by BRE

The assessment of the Dissertation is based on students' ability to develop and demonstrate the following attributes:

- to critically evaluate information;
- to take person initiative and to think independently;
- to be able to identify the scope and limitation of collected data;
- to make value judgements; and
- to communicate clearly an argument and draw logical and substantive conclusions.

Assessment Criteria Developed by CSE

1.Organization and Executions:

- appreciation of the work in hand
- review of the literature/previous work
- use of new apparatus, experimental technique, mathematical methods, computer techniques, new technology
- thoroughness of the investigation overall

2. Introduction and Definition of Research Problem:

- statement of the problem and objectives of dissertation
- review of the literature/pervious work
- definition of research hypothesis where appropriate

Assessment Criteria Developed by CSE

3. Methodology:

- Research Design – that is the overall logic, general strategy and basic plan of approach
- Research Methods – that is the process of obtaining information
- Case study, where appropriate

4. Processing and Presentation of Material:

- discussion and elaboration of the research problem
- investigation and processing of information

Assessment Criteria Developed by CSE

5. Discussion of Results and Conclusion:

- discussion and analysis of material
- development of results and findings
- conclusions and limitations of the study

6. Presentation:

- style and layout (including abstract, bibliography, summary etc.)
- grammar and quality of English
- diagrams and illustrations

FIRST STAGE

Carry out a trial run of the assessment mechanism

Evaluate and improve the initial design of the assessment mechanism

First Semester 2008/09:

- BSc in Geomatics (Geo-IT) selected for the trial run of the assessment mechanism (one-semester group project with 29 students)
- Pre- and Post- student surveys carried out
- Assessment results collected and student performance of each generic outcomes compiled with the help of EDC

FIRST STAGE

Carry out a trial run of the assessment mechanism

Evaluate and improve the initial design of the assessment mechanism

First & Second Semester 2008/09:

- BRE : 10 full-year individual projects
- BSE : BEng in Building Services Engineering
  (full-year group design project with about 50 students)
- CSE : has difficulty in inviting students to participate in the project

- All four departments continuously provide feedbacks on the assessment mechanism/rubrics for the development of the operational version of the mechanism

Work to be Done in Second Semester 2008/09

FIRST STAGE

Continue evaluate and improve the initial design of the assessment mechanism

Develop an operational version of the assessment mechanism

↓

Prepare a handbook for potential participants (staff and students)

Work to be Done in Second Semester 2009/10

SECOND STAGE

SECOND STAGE

Send invitation to students and teachers of BRE, BSE, CSE and LSGI

↓

Operate the assessment mechanism in group/individual projects

↓

Collect assessment results at end of semester one/two 2009/10

↓

Collect feedbacks from teachers and students

↓

Evaluate the effectiveness of the assessment mechanism, revamp the mechanism for future implementation, and disseminate results to parties interested in assessing student generic outcomes

Feedbacks from Departments and Trial Run Experience

- A well-designed check list would help the grading of the “process” type of assessments that based on observations of student performance.
- Different weights (0-1) can be assigned to each item of assessment rubrics to indicate their relative importance in the project. The total weight equals 1.

Written Communication rubric

	Criteria	F	D	C	B	A
0.2	**Conceptual Clarity**	Not relevant or only vaguely relevant to topic.	Less than half the content relevant to the topic. Major issues not covered at all.	Majority of the content relevant to the topic but significant issues not covered.	Content consistently relevant to the topic and covers most key issues.	All content highly relevant to the topic and covers all key issues. Student also demonstrates ability to apply own interpretations of the concept/s.
0.2	**Analysis**	No analysis.	No analysis or demonstrates poor understanding.	Analysis demonstrates limited understanding.	Clear analysis demonstrates good understanding.	Thorough and clear analysis Demonstrates excellent understanding. Student also demonstrates ability to apply own interpretations of the analysis.
0.3	**Structure and Development**	No evidence of planned structure to the report. No sense of balance or emphasis given to ideas according to their importance.	Structure and plan only vaguely evident. Often inappropriate balance or emphasis given to ideas according to their importance.	Structure and plan of assignment apparent but development and emphasis inconsistent.	Assignment follows logical sequence. Demonstrates effective use of proportion and emphasis.	Assignment follows clear, logical sequence. Highly effective use of proportion and emphasis.
0.3	**Grammar, Spelling, Presentation**	Written English so poor as to be barely understandable. Many spelling mistakes. Very poor presentation.	Frequent problems with sentence construction. Frequent spelling and grammar errors.	Sentence construction generally correct. Some spelling and grammar errors. Written style wordy or repetitive. Acceptable presentation	Written style clear and effective. Consistent use of standard grammar and punctuation. Presentation is of a high quality.	Professional presentation throughout. No grammar or spelling mistakes.

Ref: Written Communication Toolkit developed by the Griffith University (Retrieved from the World Wide Web in Sept 2007) http://www.griffith.edu.au/centre/gihe/griffith_graduate/toolkit/written/assess02.htm

- Student self-evaluation form need to be modified to better align with the criteria set in the assessment rubrics.
- Some criteria in “creative thinking”, “critical thinking” and “problem solving skills” in the initial rubrics design may be quite similar. These outcomes are discipline specific, and to a certain extent inter-related.

  Should these items be combined into one assessment domain?
- Quality assurance - it would be more convincing if experts and professionals in specific assessment domains are invited to participate in the assessment process.

Difficulties Encountered

- Recruitment of Project Fellow and Project Assistants
- Extremely tight time frame in developing the trial-run version of assessment mechanism and rubrics
- How many teachers/students are enthusiastic/willing to participate in the 2nd stage of the project ??? (invitation letter sent to four departments in 1st semester, response was not promising)

Thank You