Developing criterion referenced assessment tasks

November 2008

The purpose of a criterion referenced assessment (CRA) tasks is conveyed to the students by the capabilities which it aims to develop. When designing such assessment tasks, three questions need to be addressed:

• **What are the key capabilities to be developed by this assessment task?**
  - The capabilities will fall into one or more of a range of capabilities, depending on the learning objectives of the course and the nature of the assessment task.
  - Suitable assessment tasks need to be chosen and appropriate instruments designed to determine how students have performed.

• **What are the specific assessment criteria for each capability?**
  - An authentic assessment task will provide the opportunity to develop several capabilities in students, you may need to identify the key capabilities.
  - The assessment criteria should articulate these clearly so that students will understand the expectations of the task.

• **How will the level of performance on the criteria be determined?**
  - Assessment of high level knowledge and skills is often subjective and open to judgement.
  - In the interests of ensuring consistency and providing valuable feedback, an assessment instrument, eg a specific checklist, can be very helpful.

The tables below provide examples of instruments which could be used to assess different criteria: knowledge, skills, attitudes and generic capabilities.

**Knowledge (Cognitive domain)**

Suitable learning activities include: work based learning, essays, open book examinations, projects, problems, case studies, open questions, investigations, student portfolios.

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<th>What are the assessment criteria?</th>
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| Understanding of specific content knowledge. | The level of understanding of key knowledge areas can be rated according to the descriptors provided in Biggs’ SOLO Taxonomy: 1. Extended abstract 2. Relational 3. Multi-structural 4. Unit-structural 5. Pre-structural | Examples  
• Preparation of a checklist using the SOLO taxonomy to rate a students knowledge.  
• Annotated remarks on student work.  
• Oral presentation by a student. |
Specific skills (Psychomotor domain)
Operating equipment or carrying out a specific physical task or procedure.

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| Operating a camera to compose shots | Determination of lighting requirements  
• Assesses the lighting requirement for a particular shot  
• Appropriate use of meters to lighting levels are adequate  
• Set up sources of light to obtain the desired effect  
Correctly set-up and use camera  
• Selection and use of appropriate lenses  
• Calculate desired focal length and depth of field  
• Set aperture and exposure times to obtain the desired results. | Checklist of key steps Observation  
Assessment of the picture effects produced. |

Values and attitudes (Affective domain)
Assessment of values or attitudes is very subjective exercise and is difficult to observe.
This presents a valuable opportunity for students to do some self assessment activities where they examine their own beliefs and attitudes and how they relate these to new ideas or challenges.

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| A range of particular values and attitudes can be considered.  
This depends on the purpose of the assessment and the learning objectives of the course. | Students cold be asked to rate themselves or others on specific qualities demonstrated during the assessment task.  
• Open mindedness  
• Creativity  
• Perseverence  
• Diligence  
• Appreciation | Self and Peer assessment  
Reflective Journal |

Generic capabilities
Suitable evidence may be provided by learning activities such as: work based learning, essays, open book examinations, projects, problems, case studies, open questions, investigations

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| Information Literacy (Research): | Acknowledge information sources appropriately:  
• Use of accepted protocols to acknowledge sources.  
• Use of appropriate quotation notation  
• Adheres to copyright and intellectual property requirements  
• Categorise and store information | Preparation of a checklist to identify/rate each criterion. |
| Independent learning Planning and time management | • Clearly state the goals of the plan  
• Identify the key tasks to be done  
• Develop a timeline  
• Identify resources required  
• Monitor progress  
• Manage time effectively  
• Evaluate effectiveness of the plan | e.g. Production of an action plan conforming to certain criteria. |
| Team work | • Team goals clarified  
• Identification and distribution of tasks amongst the team members.  
• Team roles are defined and clarified  
• Team communication processes are clear | Preparation of a checklist to identify/rate each criterion. Students self-assess and peer assess using the checklist. |
| Report writing | • Structure of report  
• Use of charts and graphs  
• Use of concise language  
• Fluency  
• Data presentation  
• Resources  
• Conclusion | Checklist to identify and rate each aspect of the report. |
| Making a presentation | • Use of visual aids  
• Use of voice  
• Interaction with audience  
• Relevance of Content  
• Creativity | Checklist to identify and rate each aspect of the report. Student self assesses and the audience assess the presentation using the checklist. |
| Consultancy and interpersonal capabilities e.g. Dealing with clients | • Determination of the needs client  
• Determination of constraints for project  
• Proposal of realistic solutions to meet the needs  
• Monitor progress and adjust  
• Evaluate client satisfaction  
• Satisfaction report from client | Checklist to identify and rate each aspect of the report. Student self assesses and the audience assess the presentation using the checklist. |