Self assessment: a powerful learning tool to improve performance?

Pauline M. Ross
University of Western Sydney

What are our experiences of being assessed?

- Maybe our memory is not of the successes
- Experiences of failure, feelings of unfairness
- If we are told we are not good xxxx
- Does this make us focus more on xxxx?
  - Or does it affect our self esteem
    - Often perhaps we decide
      - “I am not good at this”

Definition of self-assessment

“Involvement of students in identifying standards and or criteria to apply to their work and making judgements about the extent to which they have met these criteria and standards”

Boud D 1995 Enhancing Learning through Self Assessment

Self assessment

- How am I doing?
- Is this enough?
- Is this right?
- Should I go further?
- What do I know, not know?

I do not understand this.
What can I do to understand this?

Self assessment or evaluation can be done self grading

Why encourage self assessment?

Self assessment

1. Identification of the criteria
2. Extent to which criteria have been met

Self assessment or evaluation can be done WITHOUT the element of grading
Need our learners to:

- Monitor what they do not understand so they can modify their learning strategies so that they can understand
- Learn how to learn
- Value their learning and develop a good self concept
- Take responsibility for their learning

AND

Self assessment can do this because it alters the power relationship

An example - UWS

- Biology, Large first year classes
- Individual self assessment and checking of progress in practical classes

"How well have I achieved the learning outcomes of the practical?"

How well have I done?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided /Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can calculate the diameter of the field of view</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can list 4 criteria which make a good biological drawing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can write out an explanation of how to balance an equation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reflecting on learning outcomes in the practical

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided /Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>What were the main things you learnt in this activity?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Go to discussion group 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. View Euglena under the microscope</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Identify nerve cells in a muscle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What follow up learning do you need to do?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tick here when completed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How have we used these?

- Checked by demonstrators each week who then assess which learning outcomes were achieved.
- Used as part of formative assessment.

As an incentive for doing this:
  - If done well: 3%
  - If done: 2%
  - If not done: 0%

Essentially NOT self-grading or Summative

I can read the balance when the output is fluctuating

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided /Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Tuesday</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Thursday</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>
But what if we did decide to use self-grading?

- Do students overrate or underrate themselves? **UNCLEAR**
- Do students of differing abilities over or underrate themselves? **UNCLEAR**
- Do students at different levels over or underrate themselves? **UNCLEAR**
- Does self-assessment improve with practice, or differ with gender? **UNCLEAR**

Some research questions

- Do students over or under rate themselves?
- Can self-grading be used with other self-evaluation practices?
- Does the ability to self-assess improve performance?
- What is the response of students?

Self-grading – Mid Semester Exam

- Model answers with marking criteria
- Guidelines on how to provide feedback
- Hand in, randomly redistribute back for peer marking
- Hand back, redistribution for self-marking
- Lecturer – final decision

Student views – from Boud 1995

1. The ability to assess one’s performance is very important 49/3
2. I found assessing my work very valuable 42/9
3. I found assessing another student’s work valuable 42/9
4. This exercise had made me more aware of what I need to know in this subject 41/11
5. The idea of self-assessment is a good one 43/43
6. 35/21

Difficulties implementing

- Innovative approach – although historically at least 60 years old
- Colleagues may view you as slightly odd and raise questions “Is this a sound idea?”
- Lots of work to do in planning for successful implementation

Advantages

- Students will be actively engaged in monitoring their learning
- Even without self-grading – focus is on the learner
  - Self-knowledge and self-understanding
Those students who self assess may have a greater rate of progress.