Self-evaluation Strategies and Medical Students: Opportunities for Critical Thinking in a CLIL-based Classroom

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Overview

• Introduction
• Rationale
• Study: (a) Assessment Creation
  (b) Classroom Practice
• Discussion
• Limitations
• Some Final Notes
Self-introduction

Where am I...
Self-introduction

What I do...

• Teach a CLIL health-science course (1st year)
• Team teach an academic writing class (1st year)
• Instruct a class on differential diagnosis (3rd year)
• Lead a student exchange program (4th year)
• Organize a campus English café (all grades)
Introduction

- Evaluation
- Student ownership of learning
- Critical thinking
Introduction

Summative Assessment = at the end of learning
Assessment of Learning (AoL)

Formative Assessment = ongoing assessment
Assessment for Learning (AfL)
Rationale

August 2016

Finland
1000+ Meta-studies

80,000+ Research Articles

200,000,000+ Students
Effect size

Effect Size = \frac{[\text{Mean of experimental group}] - [\text{Mean of control group}]}{\text{Standard Deviation}}

0.4
Which are the most powerful?

- Increasing school budgets
- Self-reported grades
- Providing feedback to learners
- Matching learning style to teaching style
Which are the most powerful?

(1.44) Self-reported grades

(0.75) Providing feedback to learners

(0.23) Increasing school budgets

(0.17) Matching learning style to teaching style
Self-reported grades

An example of self-reported grades:

Before an exam, ask your class to write down what mark the student expects to achieve. Use this information to engage the student to try to perform even better.

Hattie, in hindsight, wished he had called self-reported grades “Student expectations”

https://visible-learning.org/glossary/
Study’s guiding questions

• How can students think critically about presentations and create an assessment tool to be used by all members of the classroom?

• What will motivate students to move from a teacher-centered approach of assessment to a more student-centered approach?

• How will self-assessment and peer-assessment influence their learning outcomes?
Study: assessment creation
# Data collection

## Evaluation

<table>
<thead>
<tr>
<th></th>
<th>05/23/18 (1st Class)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO</td>
</tr>
<tr>
<td>1. I have scored my own work in class.</td>
<td>7</td>
</tr>
<tr>
<td>2. I have scored other students work in class.</td>
<td>13</td>
</tr>
<tr>
<td>3. I have made original scoresheets to score class activities.</td>
<td>19</td>
</tr>
<tr>
<td>4. I believe only teachers should score student work.</td>
<td>12</td>
</tr>
</tbody>
</table>
Data collection

<table>
<thead>
<tr>
<th>Presentation</th>
<th>05/23/18 (1st Class)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I like making solo presentations.</td>
<td>3.2</td>
</tr>
<tr>
<td>2. I like making team presentations.</td>
<td>3.7</td>
</tr>
<tr>
<td>3. I like using PowerPoint in my presentations.</td>
<td>3.5</td>
</tr>
<tr>
<td>4. I like memorizing my speech before my presentation.</td>
<td>3.0</td>
</tr>
<tr>
<td>5. I like making a presentation in English.</td>
<td>2.8</td>
</tr>
</tbody>
</table>
1. Team presentation – 09/2018
   * Immune system or mental health

2. Solo presentation – 01/2019
   * Health problem in Japan
Student brainstorming - method

- Groups of 3
- Roles: (1) leader
  (2) time keeper
  (3) notetaker
- No judgment given about an individual's ideas
Student brainstorming

• What are some things we should include in the writing of a presentation?

• What makes a presentation interesting? Not interesting?

• What parts of the presentation should be scored?
The written part

**Written Part of Presentation**

- Introduction
- Picture
- Music
- Color
- Conclusion
- Title

- Introduction → show people what we are going to talk about
- Body → explain detail
- Conclusion → what we want to say
- Joke
- Example

1. Greeting
2. Instruct
3. Body
   - Picture
   - Humor
   - Plain word
   - Gesture
4. Conclusion
Interesting ( + ) Not interesting ( - )

- difficult contents
- sentence only
- colorless
- small voice

+ Add question
  - make audience use
  - clicker
- expression (smile)
  - joke
  - use plain words
  - intone
  - eye contact
  - picture

- talk too fast
  - difficult word
  - no color
  - monotone
  - small voice

+ action
  - use music
  - use picture
  - positive

- only letter
  - don't use color
  - small voice
  - small letter
3 usages of evaluation

self

peer

teacher
# Presentation Score Sheet

<table>
<thead>
<tr>
<th>Self</th>
<th>Team</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Title:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Name:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Name:</td>
</tr>
</tbody>
</table>

## Written Message

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>10</td>
</tr>
<tr>
<td>Body</td>
<td>12</td>
</tr>
<tr>
<td>Conclusion</td>
<td>14</td>
</tr>
</tbody>
</table>

## Visual Message

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT Appearance</td>
<td>11</td>
</tr>
<tr>
<td>English Usage</td>
<td>9</td>
</tr>
<tr>
<td>Use of Visuals &amp; Media</td>
<td>9</td>
</tr>
</tbody>
</table>

- **+greeting**
- **+examples**
- **+summary**

**Total Points = 100 points**

- **Q/ A**
- **Posture & Gestures**
- **Written Message**
- **Visual Message**

**Presentation Score Sheet**
<table>
<thead>
<tr>
<th>Physical Message</th>
<th>Eye Contact</th>
<th>Voice</th>
<th>Posture &amp; Gestures</th>
<th>Q/A</th>
<th>Total Points = 100pts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>11</td>
<td>8</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>+ clear, loud and with good tempo</td>
<td>+ clear, loud and with good tempo</td>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Solo presentations – set up

Team 1 (6 Ss)

Team 2 (6 Ss)

Team 3 (6 Ss)

Team 4 (6 Ss)
Discussion

Did I Pass?
Aims of self- and peer-assessment are to:

• increase student responsibility and autonomy

• strive for a more advanced and deeper understanding of the subject matter, skills and processes

• lift the role and status of the student from passive learner to active leaner and assessor (this also encourages a deeper approach to learning)
Aims of self- and peer-assessment are to:

• involve students in critical reflection

• develop in students a better understanding of their own subjectivity and judgement.
Critical Thinking & The 4 Cs
4Cs - Content

• What is a presentation?

• What does a good presentation include?

• What needs to be assessed?
4Cs - Cognition

• What makes a good presentation and what does not?

• Which parts of the criteria are more important than others?

• How to use the criteria once it is made?
4Cs - Communication

• Language for describing presentation skills

• Language needed for discussion

• Language needed for negotiation
4Cs – Community/Culture

- Classroom community
- University community
- “World standards for presentations” community
Outcomes

• Students had much more ownership/awareness of the scoring criteria, and they reached for higher standards in their work.

• They were skilled at “coaching” other students to reach higher standards.

• Students improved in self-reporting their scores.
Outcomes

• Self-examination continued after their work was finished.

• The criteria was a “living set” of learning objectives.

• The process to create criteria helped to promote better critical thinking in the classroom.
Limitations

• Small groups are easier to manage

• It’s time consuming

• The assessment criteria needs to be easy to use
## Some final notes

<table>
<thead>
<tr>
<th>Presentation</th>
<th>05/23/18 (1\textsuperscript{st} Class)</th>
<th>01/09/19 (Last Class)</th>
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<tbody>
<tr>
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<td>3.6</td>
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<td>2.9</td>
</tr>
<tr>
<td>5. I like making a presentation in English.</td>
<td>2.8</td>
<td>3.6</td>
</tr>
</tbody>
</table>
Questions? Comments? Concerns?

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