Online Rubric Builder-"BASICS", a starting point for assessment of cognitive skills

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Syllabus Analysis
(Review of 811 syllabus documents from 2008-2013)

70.3% of instructors described 21st century and professional skills in syllabi,

only 39.5% identified an assignment that aligned with one or more of these 21st Century skills.

And only 8.9% referred to a grading rubric for those assignments

Why so Challenging?

Lack of clear definitions
Creating purposeful assignments
Assessment experience: Rubric design
Identified Criterion
Clarity of Instruction
What do you think of when I say…

Cognitive Skills
Purposeful Assessment

Think of an assignment with a cognitive skills focus

- What question did the students have to answer?
- What was the evidence of student learning?
Building Assessment Scaffolds for Intellectual Cognitive Skills (BASICS)

Go to: http://www.queensu.ca/qloa/assessment-tools/basics/

START
Identify your institution, department and year group that the assignment is intended for.
Select the assignment type

Consider is the cognitive skill set that aligns most closely with what the task is intended to elicit.

- Problem Solving
  What you do when you don't know what to do.

- Critical Thinking
  A reasonable, reflective manner of thinking focused on what to believe or do.

- Creative Thinking
  A process and ability to think of original and diverse ideas.

What is it that the students are going to be doing? (Please select one)

- Investigating, making connections, drawing conclusions and reflecting (Critical Thinking)
- Researching, planning, producing and reflecting (Creative Thinking)
- Designing, implementing and evaluating (Problem Solving)
Define the assignment topic

Describe the content and context that the learners will be engaging with.

*Note: The description provided here will be incorporated into the rubric.*

Complete the following statement

This assignment is about... (E.g. creative writing; bridge failure; light waves; research design)

Continue
For the next steps, refer to the BASICS Rubric Builder help sheet

Defining your:
- Outcomes
- Dimensions
- Components

Also:
See “Definitions” tab for word usage

**Step 1:** Select the assignment type
- Critical thinking
- Creative thinking
- Problem solving

**Step 2:** Define the assignment topic
The topic/context of the assignment is included in the rubric output

**Step 3:** Decide on the assessment dimensions
- Explain issues
  - Select and use evidence
  - Analyze context and assumptions
  - Present a position
  - Draw conclusions
- Demonstrate competencies
  - Take risks
  - Solve problems
  - Embrace contradictions
  - Demonstrate innovation
  - Connect and synthesize
- Define problem or purpose
  - Identify strategies
  - Propose solution(s)
  - Evaluate solution(s)
  - Implement solution
  - Evaluate outcomes and implications

**Step 4:** Select the assessment components
- Rubric automatically generated

**Step 5:** Edit rubric scaffold to semantic preferences and finalize
Decide on the assessment dimensions

Dimensions are the breakdown elements of the cognitive skill. For skill development, coverage of all dimensions is suggested.

What dimensions do you want to assess? (click all that apply)

- [x] Define problem
- [x] Strategies
- [x] Solution / hypothesis
- [x] Evaluation
- [ ] Implementation
- [ ] Outcomes / implications
Select the assessment components

Select the components that are applicable to your assignment type and topic. Text enlarges when component has been selected.

“Submit”. The rubric app auto-fills the rubric based on the choices selected.

Select all that apply, for example:

![Table with assessment components]

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Patterns</th>
<th>Formats</th>
<th>Techniques</th>
<th>Models</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking Risks</td>
<td>Possibilities</td>
<td>Styles</td>
<td>Strategies</td>
<td>Methods</td>
<td>Arrangements</td>
</tr>
<tr>
<td>Problems</td>
<td>Design</td>
<td>Composition</td>
<td>Proposal</td>
<td>Solution</td>
<td>Prototype</td>
</tr>
</tbody>
</table>
Review the text in your rubric.

The “edit” function allows for fine tuning of language.

If you would like to change the assessment dimensions, either select the back arrow, alternatively what is described is not what you intended your students to demonstrate, you could start over.

Note:
Levels displayed (developing, accomplished or advanced) are dependent on the year group identified.
Once you are happy with how the rubric text reads, select “Finalize” to save your rubric.

Note: This will save your rubric to the list, and enable it to be downloaded as a .csv file. Using the search tab previously created rubrics are searchable by topic, institution, department, or year group.

<table>
<thead>
<tr>
<th>Assignment: “Research project”</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Intended for assessment in 4th department for Fourth Year (Senior) students.</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Creative Thinking</th>
<th>Developing</th>
<th>Accomplished</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competencies</td>
<td>Uses techniques and skills to adapt an example to own specifications for a research project</td>
<td>Uses techniques and skills to create a new object, product, or solution for a research project</td>
<td>Evaluates own creative processes when applying techniques and skills to create a new object, product, or solution for a research project</td>
</tr>
<tr>
<td>Taking Risks</td>
<td>Compares possibilities and strategies for a research project</td>
<td>Formulates new possibilities and strategies for a research project</td>
<td>Weighs risks, and takes on new / potentially risky possibilities and strategies for a research project</td>
</tr>
<tr>
<td>Problems</td>
<td>Considers multiple approaches to generate a research proposal</td>
<td>Experiments, and selects logical approach to generate a research proposal</td>
<td>Predicts problems and recognizes consequences of various approaches to generate a research proposal</td>
</tr>
<tr>
<td>Contradictions</td>
<td>Allows for some alternatives and positions in own work</td>
<td>Explains alternatives and positions as applied to own work</td>
<td>Embraces alternatives and positions and analyzes them for integration in own work</td>
</tr>
<tr>
<td>Innovation</td>
<td>Incorporates novelty through experimenting with forms and ideas</td>
<td>Develops a novel or unique form and idea</td>
<td>Extends a novel or unique form and idea, that crosses contextual or content area boundaries</td>
</tr>
<tr>
<td>Connections / synthesizing</td>
<td>Explores new links, relationships, and connections between various elements of the research project</td>
<td>Assesses links, relationships, and connections between various elements of the research project, incorporating them to form a coherent solution/ product</td>
<td>Creates a novel solution or product based by applying understanding of links, relationships, and connections between various elements inherent in the research project</td>
</tr>
</tbody>
</table>
Review identified criterion and ensure clarity of instruction

1. Review the rubric to determine if it describes your intended outcomes.
2. Review the assigned task brief to evaluate the likelihood of it eliciting demonstration of the desired outcomes.
3. Design specific learning experiences to support learners achievement of the outcomes.
4. Reflect on the learning achievement and refine the assessment to cater for learners needs.

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Questions?

For more information:
http://www.queensu.ca/qloa/assessment-tools/basics/

Contact:
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Example critical thinking assignment
Medical Marijuana: For or against?

Write a position statement, and discuss your reasoning. Use the evidence below to support your position.

Medical pot producer funds sober driving campaign

“Time to step up and do our part as responsible corporate citizens,’ CEO says

Canada’s largest producer of medical marijuana is funding a national campaign to raise awareness about the dangers of driving while under the influence of the drug.

Canopy Growth Corporation, which owns Smiths Falls, Ont., cannabis producer Tweed and Toronto-based Bedrocan Canada Inc., will provide funding over three years to the Canadian Drug Policy Coalition and Mothers Against Drunk Driving Canada to develop and administer the campaign.

Federal marijuana legislation to be introduced in spring 2017, Philpott says

"We’re proud to be bringing together the Canadian leaders in sober driving campaigns with leaders in the development of responsible drug policy for this important initiative,” said Canopy Growth Chairman and CEO Bruce Linton in a news release.

"Now that we’re on the verge of a legal access to cannabis for personal use, it's time to step up and do our part as responsible corporate citizens.”

26 Vancouver pot shops slapped with tickets for operating illegally

By Lien Yeung, CBC News Posted: May 02, 2016 3:34 PM PT Last Updated: May 02, 2016 3:34 PM

Marijuana dispensaries like the B.C. Pain Society were fined $250 for violating city regulations and operating without a business licence.

Marijuana dispensaries like the B.C. Pain Society were fined $250 for violating city regulations and operating without a business licence. (Brenna Rose/CBC)

The City of Vancouver says its bylaw officers have handed out tickets to 26 pot shops for operating illegally.

In October 2015, the city gave 140 marijuana dispensaries a deadline of April 29, 2016 to relocate or shut their doors for not meeting licensing criteria, like being too close to a school.

The city said bylaw officers started enforcing that deadline Saturday by giving each of 23 pot shops a $250 fine for remaining open, according to a press release.

Central side-effects of therapies based on CB₁ cannabinoid receptor agonists and antagonists: focus on anxiety and depression


Both agonists (e.g. Δ⁹-tetrahydrocannabinol, nabilone) and antagonists (e.g. rimonabant, taranabant) of the cannabinoid type-1 (CB₁) receptor have been explored as therapeutic agents in diverse fields of medicine such as pain management and obesity with associated metabolic dysregulation, respectively. CB₁ receptors are widely distributed in the central nervous system and are involved in the modulation of emotion, stress and habituation responses, behaviours that are thought to be dysregulated in human psychiatric disorders.

Accordingly, CB₁ receptor activation may, in some cases, precipitate episodes of psychosis and panic, while its inhibition may lead to behaviours reminiscent of depression and anxiety-related disorders. The present review discusses these side-effects, which have to be taken into account in the therapeutic exploitation of the endocannabinoid system.