Creating Autonomy, Mastery, & Purpose using Assessment Criteria

Patricia Deo & Elizabeth Swanson
International School of Düsseldorf

presentation link:
http://goo.gl/hjdOsp

Also, please open your subject guide and MYP: From principles into practice on the OCC.
CONTACT US!

Patti Deo
deop@isdedu.de

Liz Swanson
swansonl@isdedu.de
Our driving question...

What teaching practices and learning experiences empower students so they want to, can and, do manage their own learning?
Overview of our time together...

Part 1: “Macro-view”
- Research/Theory
- Command Terms

Part 2: “Micro-view”
- Objectives/Assessment Criteria
- Daily Learning Outcomes
What it means in terms of students is giving them some discretion over what they study, which projects they do, what they read, or when and how they do their work—just upping the autonomy a bit. We’re not talking about a wild and wooly free-for-all where everyone does whatever they want whenever they want to do it.
Mastery: Finding the “Goldilocks” tasks (just right)

“If you are doing something easy, you are never going to improve; if you are doing something too hard, you are not going to succeed, so you won’t improve that way, either.”

-Daniel Pink
Purpose: Uncovering the “why”

“Research has shown that people do better at a task...if they know why they are doing it in the first place.”

-Daniel Pink

“The simplest, most important performance-enhancing tip...is to have two fewer conversations about how to do something and two more conversations about why they’re doing it.”

-Daniel Pink
“Each **command term** refers to specific **thinking skills, practices and processes** that constitute a subject or discipline, **along with its content**. In order to understand a discipline, which is a particular **way of knowing**, it is necessary to be fluent in the relevant command terms.”

“Most command terms are applicable across subject groups.”

MYP: From principles into practice (p. 82)
What the MYP says about command terms...

Having a consistent definition of a command term enables students to understand the meanings and their application across disciplines. This clarity of terminology is especially important for students with diverse learning needs and complex language profiles. Consistent application of command terms reduces stress and confusion about their meaning, and empowers students to manage their own learning and transfer cognitive processes and academic skills.

MYP: From principles into practice (p.82)
Questions to consider about ourselves as teachers...

To what extent do we as teachers understand the expectations of the command terms?
Questions to consider about ourselves as teachers...

To what extent do we provide learning experiences specifically designed to develop the skills, practices, and processes that are described by the command terms and that will support the type of thinking necessary for students to reach and demonstrate learning at their highest achievement levels?
What can you now identify is the difference between “apply” and “interpret”?

And, more importantly, what do our students “need” in order to be able to recognize (on their own) when and how they should APPLY or INTERPRET?

**apply**- use knowledge and understanding in response to a given situation real circumstances. Use an idea, equation, principle, theory, or law in relation to a given problem or issue. (See also “use.”)

**Use**- apply knowledge or rules to put theory into practice

**interpret**- use knowledge and understanding to recognize trends and draw conclusions from given information.

MYP: From principles into practice (App. 3)
Turn & Talk (Apply vs. Interpret)

- What are the thinking skills necessary to *apply* information as opposed to *interpret* information?
- When do those different skills “come into play” in your subject area?
- What might be some ways to support your students to be able to learn *when* and *HOW* to *apply* and *interpret* information?
What I did to better understand the command terms

Perfect First Investment
www.greenwood-management.com
This armchair, secure investment is perfect for new investors, act now!
Now you try...

- Look at the command terms used in the 5/6 vs. 7/8 achievement levels of your subject guide
- Look at the definition of the command terms in Appendix 3 (pg. 108) of MYP: From principles into practice and identify the differences
- What would your students have to do or produce in order to demonstrate they have the skill level described by the different command terms?
Some questions to consider about our students...

- To what extent do our students understand the expectations of the command terms?

- To what extent do our students independently use the assessment criteria and command terms to inform and guide their work?
Turn and talk

What did you discover about the command terms for the 5/6 and 7/8 achievement levels?
My “journey” with the command terms...
<table>
<thead>
<tr>
<th>Criterion C: Knowledge and understanding of science</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strand 1</strong></td>
</tr>
<tr>
<td><strong>Recalls some scientific ideas, concepts, and/or</strong></td>
</tr>
<tr>
<td>processes</td>
</tr>
<tr>
<td>Here are some examples of why I think I do this in my assessment:</td>
</tr>
</tbody>
</table>

| **Describes scientific ideas, concepts, and/or processes** |
| Here are some examples of why I think I do this in my assessment: |

| **Uses scientific ideas, concepts, and/or processes correctly to construct scientific explanations** |
| Here are some examples of why I think I do this in my assessment: |

<table>
<thead>
<tr>
<th><strong>Strand 2</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applies scientific understanding to solve simple problems</strong></td>
</tr>
<tr>
<td>Here are some examples of why I think I do this in my assessment:</td>
</tr>
</tbody>
</table>

| **Analyzes and breaks down a familiar problem and applies appropriate scientific principles or methods to solve the different aspects of the problem** |
| Here are some examples of why I think I do this in my assessment: |

| **Analyzes and breaks down an unfamiliar problem (a problem that is new for you) and applies appropriate scientific principles or methods to solve the different aspects of the problem** |
| Here are some examples of why I think I do this in my assessment: |
Increasing student awareness and empowerment, v. 3

From the work you have done on the assessments, what have you been able to do...?

<table>
<thead>
<tr>
<th>1) SHOW KNOWLEDGE of science</th>
<th>Assessment:</th>
<th>Assessment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td>Date:</td>
<td>Date:</td>
</tr>
<tr>
<td>I can remember scientific ideas when asked questions.</td>
<td>I think I have done this because in my assessment:</td>
<td>I think I have done this because in my assessment:</td>
</tr>
<tr>
<td>I can give a scientific name or short answer (but no explanations).</td>
<td>I think I have done this because in my assessment:</td>
<td>I think I have done this because in my assessment:</td>
</tr>
<tr>
<td>I can give a short summary of scientific ideas.</td>
<td>I think I have done this because in my assessment:</td>
<td>I think I have done this because in my assessment:</td>
</tr>
<tr>
<td>I can give a detailed description of a scientific process, situation, event, or pattern.</td>
<td>I think I have done this because in my assessment:</td>
<td>I think I have done this because in my assessment:</td>
</tr>
</tbody>
</table>
Connections between daily learning outcomes and autonomy, mastery, and purpose

- build a sense of self-efficacy (belief that they CAN be successful)

- strategic, self-regulators (can begin to make choices about their own success)
• “The single most important method for routinely sharing learning targets is using assignments that match—really match—the learning goal.”

• “The student will strive to do the assignment, not the abstract goal. "If I can do [this assignment], then I can do [the learning objective]."”

• “Teachers should always share their goals for students' learning.”

Source:
Objectives/ SOI/ Criteria/ Assessment Tasks into Student Outcomes

Year 2: Objective B: Inquiring & Designing
  ii. outline a testable hypothesis and explain it using scientific reasoning

Criteria B: Level 7/8:
  i. outline and explain a testable hypothesis using correct scientific reasoning
  ii. [Image of a whiteboard with a diagram of the experimental cycle]
Progression of Student Outcomes (shared with students):

- I can create a scientifically supported, testable hypothesis.
  - I can define “hypothesis.”
  - I can identify the differences between a testable and untestable hypothesis.
  - I can create a testable hypothesis using the words, “if,” “then,” and “because.”
  - I can identify scientific reasoning that will support my hypothesis.
‘Check-In’ For Understanding- “Just in Time”
(Do we meet today’s outcome?)

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senan</td>
<td>If I switch on the Bluetooth for 10 minutes documenting my battery, then it will decrease the battery and use it up more. Because using Bluetooth is another thing for my laptop to think about so it uses up more battery.</td>
</tr>
<tr>
<td>Summer</td>
<td>If I open every application open for 5 hours, then my battery will decrease because it’s too much for the MacBook to have 61 applications open.</td>
</tr>
<tr>
<td>Raphaella</td>
<td>If (keep all the applications open during a whole school day) then (the battery life will decrease more quickly than usual) because (the applications are still loading, even if you aren’t using them).</td>
</tr>
<tr>
<td>Braxton</td>
<td>If (Increasing the brightness to the max during the whole school day) Then (the battery will decrease more quickly) Because (the brightness takes a lot of energy)</td>
</tr>
<tr>
<td>Francesco</td>
<td>If I (Put many videos in the background Sound muted) for 5 minutes) Then (the battery life will decrease rapidly) Because lots of movement on screen requires light and light burns battery.</td>
</tr>
<tr>
<td>Philipp</td>
<td>If I open each application during a whole hour I think the battery will decrease faster.</td>
</tr>
<tr>
<td>Lenni</td>
<td>If I leave Bluetooth on for the whole day then the battery will decrease faster because Bluetooth also needs battery it does not just get the electricity from nowhere.</td>
</tr>
</tbody>
</table>

- Quick verbal check-in with each student
- Checking in with each student's paper/screen
- Thumbs up/down/middle
- Ticket Out the Door
- Google Doc
- Schoology/Edmodo
- Quiz

We start and end each day with the outcome.
### Beginning a Unit with Outcomes

- Pass out outcomes on Day 1
- Have students read through them and underline all scientific vocabulary (new or old)
- Create a concept map with background knowledge on the unit
- Add to concept map as each new outcome is achieved

<table>
<thead>
<tr>
<th>Student Expectations/Learning Outcomes</th>
<th>Graded Assessment Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can explain how and why life changes over time.</td>
<td>Task: Based on predictions from Units 1 &amp; 2, students will predict the future adaptations of ONE species that will live in ________ in the future.</td>
</tr>
<tr>
<td>I can explain how genes/traits move through families and populations.</td>
<td>- These predictions will be based on real adaptations of animals of today in similar climates.</td>
</tr>
<tr>
<td>I can explain the difference between mutations and variations and how these affect organisms and populations.</td>
<td>- Students will explain how their creature's adaptations show evolution/natural selection.</td>
</tr>
<tr>
<td>I can link the changes in the earth's surface and atmosphere with changes in living things over time.</td>
<td>Assessment Criteria:</td>
</tr>
<tr>
<td>I can define adaptation.</td>
<td>A: Knowledge &amp; Understanding of Science</td>
</tr>
<tr>
<td>I can explain why some adaptations are better than others.</td>
<td>D: Reflecting on the Impacts of Science (iii/iv)</td>
</tr>
<tr>
<td>I can explain why some organisms and populations survive while others do not.</td>
<td></td>
</tr>
<tr>
<td>I can explain how and why certain adaptations are specific to certain animals.</td>
<td></td>
</tr>
<tr>
<td>I can make a prediction supported by scientific evidence.</td>
<td></td>
</tr>
<tr>
<td>I can explain natural selection.</td>
<td></td>
</tr>
</tbody>
</table>
Linking the Daily with the Long-Term

- Time spent in class leads directly to higher achievement
- Not year level specific
- Constant visual reminder
Tips for Writing Student Outcomes/Targets

● “Hey, Dad! Watch me!” test for verb choice

● Is the verb appropriate for the type of thinking/level of understanding that a student should have?

● Where in the learning process are we (Gradual Release of Responsibility)?
Determine the “big ideas”

40 years

- KEY Concept (1)
- RELATED Concepts (2-3)
- Global Context (1)

Statement of Inquiry

Inquiry Questions

ASSESSMENT TASK

- Objectives/Highest Criteria Bands
- Real-life (Global) Context
- AtL Skills
**Assessment Task**: What will students need to know, understand, and do in order to reach the highest band of the criteria for your chosen objectives?

<table>
<thead>
<tr>
<th>Conceptual</th>
<th>(Understand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factual</td>
<td>(Know)</td>
</tr>
<tr>
<td>Procedural</td>
<td>(Do)</td>
</tr>
<tr>
<td>ATL skills</td>
<td>(Do/Have)</td>
</tr>
</tbody>
</table>
Fitting into the unit planner...

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Learning Engagement</th>
<th>Formative Assessment</th>
<th>Differentiation Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do students need to know, understand, and be able to do in order to meet the objectives addressed in the unit? (when possible, use MYP command terms as the verb)</td>
<td>What will students be doing to meet the learning outcome? (Include links to assignments)</td>
<td>How will I know that they have met the learning outcome?</td>
<td>How might I change the learning experiences, if necessary, for ALL learners to meet the outcome? (Include links to differentiated assignments, if necessary)</td>
</tr>
</tbody>
</table>
Now you try...

- Choose **one** of your objectives strands/highest criteria band.

- Create a progression of student learning outcomes that will allow students to achieve the objective
Click [here](#) to share and read “top tips” to create autonomy, mastery, and purpose using the assessment criteria.
Bibliography/Additional Resources

Click [here](#) for bibliography