Allowing for Pacing in a Content Driven Course

Janel Weiland
Edina Public Schools
7th grade science

Access at:
https://tinyurl.com/y9bgxyoe
1. **Barriers**

Content driven class: 7th grade science covers 29 content based standards between Biology and Geology.
So many attempts!

- Enriched Projects
- Opt-out on tests

**Positives**
- learners connected to passions and interests
- amazing products were created
- highest level of engagement

**Negatives**
- grading
- having evidence that learners really knew the material
- generic rubrics
Depths of Knowledge Wheel

✗ Similar to Bloom’s taxonomy
✗ 4 levels of thinking
✗ Science standards are all in levels 1 & 2
✗ Levels 3 & 4 allow for more personalized learning
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Access at: https://goo.gl/b5QDyo
Webb’s Depth of Knowledge

**DOK 1**
Recall & Reproduction
Who?  
What?  
Where?  
When?

**DOK 2**
Basic Application of Skills and Concepts
How did it happen?  
Why did it happen?  
How does it work?  
Why does it work that way?

**DOK 3**
Strategic Thinking
How can you use it?  
Why can you use it?  
What is the cause?  
What if the effect?  
What is the reason?  
What is the result?

**DOK 4**
Extended Thinking
What is the impact?  
What is the influence?  
What is the relationship?  
What if?  
What would happen?  
What could happen?  
What do you think, feel, believe?

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5. Redesigning Units

Using the Depths of Knowledge Wheel to allow for multiple pathways of learning.
How

✗ Identify the standards/learning targets
✗ Consider the Depths of Knowledge
✗ Map out a pacing guide that allows for flexibility
✗ Consider the multiple pathways available to learners? How will they be assessed?
✗ Implement reflection
See these links for examples

https://goo.gl/Wm2yA3

https://goo.gl/PUD6ey
Implementation in the Classroom

✗ Explained DOK Wheel

✗ All responsible for DOK 1 and 2

✗ Could pace faster to do DOK 3 and 4

✗ All will take the test (90% or higher to pace quicker)

✗ **DOK 3 and 4** → no grade → Extended Learning Showcase (FLEX)
# Question Matrix

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<td>Letting Go</td>
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<td>✗ Unsure of DOK 3 and 4 questions</td>
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<td>✗ Time</td>
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<td>✗ Number of students that would participate</td>
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<table>
<thead>
<tr>
<th>Courage</th>
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<tbody>
<tr>
<td>✗ Confidence in learner empowerment</td>
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<tr>
<td>✗ Value in any time spent on extended thinking</td>
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<tr>
<td>Name</td>
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<tr>
<td>Otteson, Harold</td>
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<tr>
<td>Schnell, Heather</td>
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<td>Sill, Mason</td>
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<td>Sorensen, Anna</td>
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<td>Sprenkle, Reid</td>
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<td>Steven, Everett</td>
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</tbody>
</table>
How things went

✗ 10-15 students participating out of 170

✗ Practice and Guidance with the Question Matrix was key!

✗ Use of FLEX space for students to work

✗ Communicated electronically when needed

✗ Typically, students had 3 days to do DOK 3 and 4 work
Adjustments

- Changed DOK 3 & 4 Guidelines

- Research Question proposals (Flipgrid)

- Less about product

- Focus on WHAT was learned and HOW
Extended Learning Showcase

Not a presentation!

No product needed

Do not need to be “finished” to share

Get ideas and suggestions/a safe space for mistakes

Can continue researching in future units

Offered 1-2 times per month during FLEX
Research Question Examples...

How might the world be different if a meteor never killed off the dinosaurs?

How might different geological formations be affected if they were weathered by a different weathering agent?

If a meteor hit the Earth today, how might the marine life be affected and how does this compare to marine life of the past?
Student Reflection

“One reason why I like the faster pacing experience is because you don’t have to feel like the class is too easy or that you are trapped and can’t show what you know. A faster pace shouldn’t be set though, this is because some people pace slower than others.”

-Emmett
Looking ahead

- DOK 3 and 4 practice lesson for ALL students twice a year.
  *Provide DOK 3 and 4 question examples for students to sort.
  *More practice using Question Matrix

- Parent Panel (combine advisory and FLEX)

- Experiments
Resources

Parent letter

Unit Outline

DOK 3 & 4 Guidelines
Q and A
Contact me:

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