Reflection and growth in teaching:
Designing and implementing a high school Biology and society course in the context of action research

Brad Kozel
CCT 694 Synthesis
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Saber Tooth Curriculum

By: Abner J Peddiwell AKA Harold Benjamin

Why this lesson? For these students? At this time?

(Peddiwell, 1939)
My Setting
Brookline High School

School within a School

Academics Learning

SWS Community

Empathy Care

Democracy Justice
My Saber Tooth Moment

- Standards and assessment
- Technology: distraction or value added
- Collaboration or cheating
- Process or Product

(Princeton Review, 2015)
My Saber Tooth Moment

Where am I? Where is my curriculum?

Critical and Creative Thinking and Science in a Changing World

What will I do to shape my school, myself and my students?
**New senior year elective: SWS Biology and Society**

<table>
<thead>
<tr>
<th>Why this class?</th>
<th>...for this population?</th>
<th>...at this time?</th>
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<tbody>
<tr>
<td>• Students/teachers are <strong>asking questions that can be addressed</strong> by this class</td>
<td>• <strong>Seniors</strong> have foundational knowledge</td>
<td>• <strong>Dire biological issues</strong> in our world</td>
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<td>• Focus on <strong>relationship building</strong> in the classroom through learning</td>
<td>• Fits well with other SWS class approaches</td>
<td>• Start to a longer process</td>
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<td>• Establishing my voice in SWS</td>
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CCT Synthesis - SWS Biology and Society in the Context of Action Research

(Taylor and Szteiter, 2012)
SWS Biology and Society: Course Snapshot

**“Big buckets”:**
- Conservation and Biodiversity
- DNA technologies
- Human health and wellbeing
- Bioethics

**Skill development:**
- Perspective taking
- Reflective practices
- Finding, critiquing resources
- Scientific literacy

**Incorporating SWS teaching and learning values**

**Critical thinking, Information Technology, PBL**

**Biology and Society Topics**

**Democratic Classroom practices**
SWS Biology and Society: Instructional Framework

- 6Es instructional framework
- PBL
- Combines group and individual inquiry
- Incorporates Critical and creative thinking practices.
- Incorporates reflective practice

(Baybee, n. d.)
Possible Unit on Cloning


Free writing:
- What Biological questions arise for you from seeing this clip?
- What societal questions arise for you from seeing this clip?
SWS Biology and Society: Mind Mapping

Creatively documenting process and product
SWS Biology and Society: Democratic Practices

- Drawing on SWS tradition
- Class room discussion
  - Student led discussion
  - Teacher participates
  - Knocking and anti-knocking
- Voting on subjects
  - Pitch day
  - Cooperative learning
SWS Biology and Society: Extend phase

**: Contribution to the learning community**
Action Research: Current and Future work

- Proposing and Planning
  - CCT 694 Synthesis
  - Constituency building in SWS and BHS
  - Generating interest among students

- Implementation
  - School year 2018-2019

- Evaluation
  - SWS staff perspectives
  - SWS student perspectives
  - Community level impact

(Taylor and Szteiter, 2012)
Looking Ahead

- Growth towards establishing a voice in SWS community
Looking Ahead

- Future cycles of action research…informing change to
  - SWS Biology and Society curriculum
  - 1st year Biology classes
  - Extend phase of SWS Biology and Society
    - Influencing the community on topics investigated
    - Influencing colleagues in non-traditional educational pedagogy.
References


☞ SWS staff (2016). “4 circles diagram” SWS Community framework.