Applying the OER Life Cycle for Teaching Materials

**Step 1:** Find teaching materials for the classroom

**Step 2:** Adapt the resource so that it is relevant for your class and students

**Step 3:** Use your adapted teaching materials and assess student learning

**Step 4:** Refine the materials after implementation and assessment

**Step 5:** Share your refined product on an OER platform so that others can find and use

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OER Life Cycle Barriers

While the accessibility of publically available teaching materials has substantially improved, barriers remain for resharing:

- **Awareness**
- **Lack of infrastructure**
- **Academic culture and lack of incentives**

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What is QUBES? [https://qubeshub.org/](https://qubeshub.org/)

- Quantitative Undergraduate Biology Education and Synthesis project
  - Math × Biology × Community

- Community building:
  - Supporting professional development through meetings and workshops
  - Online infrastructure for Faculty Mentoring Networks
  - Integrated computational tools
  - OER publishing platform for original and adapted resources
    - Key features:
      - Adaptations ("forking") and versioning
      - Access metrics: 135 total view(s), 36 download(s)

- Future Directions: Expand the resources and the community using them

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HHMI BioInteractive on QUBES

[https://qubeshub.org/groups/hhmibiointeractive](https://qubeshub.org/groups/hhmibiointeractive)

Current Resources:

[Spreadsheet Tutorials](https://qubeshub.org/groups/hhmibiointeractive)  
[Flask Fates](https://qubeshub.org/groups/hhmibiointeractive)  
[What is HHMI BioInteractive?](https://qubeshub.org/groups/hhmibiointeractive)  
[What is QUBES?](https://qubeshub.org/groups/hhmibiointeractive)  
[Example Educator Publications](https://qubeshub.org/groups/hhmibiointeractive)

Example Original BioInteractive Record on QUBES:

Finch Evolution Collection

By HHMI BioInteractive

Over the past four decades, biologists Rosemary and Peter Grant have documented the evolution of the famous Galápagos finches.

Pls: Kaitlin Bonner, Arietta Fleming-Davies

Feedback?  
Interested in OER publishing your teaching materials?  
[Feedback?](https://qubeshub.org/groups/hhmibiointeractive)  
[Interested in OER publishing your teaching materials?](https://qubeshub.org/groups/hhmibiointeractive)  
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