What is undergraduate research?

Thinking about incorporating more research in future undergraduate courses? Or concerned about how to do it? It’s easy to forget that research is a continuum and that there are many ways to incorporate research-based thinking and research-based activities in your classroom. Chances are you are already doing it— even if you don’t require any papers!

The Research based learning decision-making wheel (below) provides an overview of the variety of ways we can think about research. What I like about this graphic is that it shows how we can move from a highly scaffolded approach to a more independent inquiry approach. For example, those questions or prompts you have written for students— those are highly controlled research tasks (upper right pie slice). As you move towards the outside of the wheel, where the student decides upon the question, you are inviting more independent inquiry.

![Research-based learning decision-making wheel](image)

*Fig. 1. Research-based learning decision-making wheel (Brew, 2013, p. 613).*
In her article featuring this research-based decision wheel, Brew also builds on the work by Willison and O’Regan (see resources) who provide the following framework for developing students’ autonomy:

<table>
<thead>
<tr>
<th>Activities</th>
<th>Levels of Autonomy to apply to each activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embark &amp; determine a need for inquiry</td>
<td>Level 1: Closed inquiry with high degree of structure / guidance</td>
</tr>
<tr>
<td>Find / collect information / data</td>
<td>Level 2: Closed inquiry with some structure / guidance</td>
</tr>
<tr>
<td>Critically Evaluate</td>
<td>Level 3: Closed inquiry working independently</td>
</tr>
<tr>
<td>Organize Information</td>
<td>Level 4: Open inquiry within structured guidelines</td>
</tr>
<tr>
<td>Synthesize, analyze and apply</td>
<td>Level 5: Open inquiry with self-determined guidelines</td>
</tr>
<tr>
<td>Communicate</td>
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</tbody>
</table>

**Integrating research into your classroom**

By thinking of research as a wider spectrum of activities, you can more clearly articulate these student learning outcomes and also identify your class activities as research-oriented. For example, do you ask students **what other questions they might have** at the end of a discussion? That’s an entrée into research! You can follow up by inviting a librarian to show students how to use OneSearch and/or asking students to find an article related to their question.

In other words, integrating research-related activities into your curriculum does not always mean that students need to write a research paper! Students benefit from practicing a wide variety of research skills. Practicing **asking questions**, **evaluating data or theories** and **organizing information** both help to build the foundation for larger projects. Teaching students **how to cite resources** according to your disciplinary practices is a research practice—especially if you help them to understand why they should do so (e.g. to enter into the scholarly conversation, to explore (current) works in the field, to demonstrate to faculty that they have prepared, etc.).

Another strategy to **creating a research-oriented mindset** is to structure your class around a **central question** (rather than a theme). Consider, for example, the difference between:

- This course explores how the literature and philosophies of the Enlightenment led to revolution in France.
- Is it possible for literature and/or philosophy to cause a revolution?

This simple step of using a question instead of a theme creates a context of exploration for your class and promotes the idea that students, by finding answers to the question, will be creators of knowledge.
Resources

- Research Skill Development Framework (URL is to .pdf): Similar to Willison's framework, this chart provides a very detailed list of activity types, according to structure/support provided (7 levels of autonomy from highly scaffolded > independent inquiry). For example, a highly structured organization task is “Organize info/data using a choice of given structures.”

- Undergraduate Research Journal List: These journals accept a wide variety of research, scholarly articles, creative writing, artwork and photography.

- CSUSB Office of Student Research: Find out about activities, internships, funding opportunities, peer research mentors and more.

Works Cited


Blackboard Webinars (Free)!

The Blackboard Academy is offering a variety of free webinars in May and June.

BB Grading Hack

In your grading queue, next to a Quiz / Test, click on the down arrow to access the menu pictured below. If you choose Grade By Question, BB will organize all of the tests by question. But you can further refine this process by going to the Filter Questions by Status dropdown menu and choosing Needs Grading. Then you will only see the short answer and essay questions that need your input. Objective questions such as multiple choice, true/false, etc. will not appear in the list.

Grade All Users (3)
Grade with User Names Hidden (3)
Grade by Question
View Attempts (3)