Writing in Project Dragonfly

This resource provides a brief introduction to writing in Project Dragonfly (Biology and Ecology) through the lens of threshold concepts. It includes:

1. An overview of what writing characteristics are valued in Biology and Ecology
2. Links to videos that discuss writing in Project Dragonfly
3. Examples of what makes good writing in Project Dragonfly

What does Project Dragonfly value in writing?

Biology and Ecology value:

- **Empiricism/objectivism** (large sample size that enables generalization): A large sample size can cause tension when trying to go deeper with communities (seen as non-scientists) or integrate what are viewed as more subjective human or social issues.
- **Discovery:** new understanding based on empiricism.
- **Stakeholder engagement** (some value): Engage with community and appropriate stakeholders to establish research questions; continually revisit stakeholder opinions to ensure participation.

Writers are credible when they:

- Present **logical** writing building off **existing literature**.
- (Some value) Create **numerous** accepted publications in **high impact** journals.
- (Some value) Engage **multidisciplinary** approaches.

Our citation practices embody these values, which can be seen in examples of how authors:

- **Integrate past authors' work** throughout **multiple sections of an article** to establish previous work in the field and historical perspective.
- Use **concise paraphrasing** of previously established ideas.
- Cite **author's name and year of publication in non-integral citation style** to keep **focus on the writer's/author's ideas**.

Effective writing in Project Dragonfly (Biology and Ecology) will make these moves:

- Link to well-known, established **fundamental ideas and authors** in the field.
- Create detailed, reproducible **methodologies**.
- Write **comprehensibly without jargon; explain concepts**.
- Engage in **peer review**.

Writers in this area should expect to invest time in the work it takes to write with revisions and peer feedback; take time to understand the tension between empiricism and activism and find the place in the field the writer is best suited for.

Videos about writing in Project Dragonfly

The following videos were created by teachers in Project Dragonfly and explain important ideas about writing and about the field:

Engaging Communities

Jill Korach talks about the tension between empiricism and activism in Project Dragonfly. She discusses how to engage effectively with communities while still serving as professionals in the field of Biology.

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Jamie Anzano discusses the ideas behind Project Dragonfly—inquiry, community, and voice—and talks about how students can incorporate these ideas into their projects.

Citation Practices

Kevin Matteson outlines five points for writers learning how to create citations for science writing.

Examples of good writing in Project Dragonfly

The accompanying piece of student writing—an Inquiry Action Project (IAP) (annotated-sample/index.html)—demonstrates some of the values and conventions of how to write in Project Dragonfly (Biology and Ecology), including examples of how to:

- Engage outside stakeholders in research in accordance with the Project Dragonfly principles of **participation** and **voice for all**

- Define the **actions** resulting from a particular research project

- Add **citations** appropriately

- Draw on research in a manner that synthesizes previous literature

- Use relevant **headings** and **subheadings** for **signposting** and **organizational** purposes

- **Clearly state aims and objectives** of a project

- Write a **methods** section that is **clear, understandable,** and **reproducible**

- **Create** and **format** tables to help readers understand results

- Appropriately incorporate **first person** to reflect Project Dragonfly's objective of including **personal reflection** and **openness** in the writer's style

- Incorporate **figures** and **charts** to visually display and clarify results

- Frame results in a thorough **discussion**, including references to past literature

- Write the "**Action**" section of the IAP so that the resulting actions are **clear**

- Format **bibliography** and **appendices**

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