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.

**Project Dragonfly: Engaging...**

**QUEST**

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

**Project Dragonfly: QUEST(....**

**Citation Practices**

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

**Project Dragonfly: Citation...**

**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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