

Introduction to Module 5

For Teachers:

In Module 5, students will begin to engage in research collaboration, setting and establishing group norms and responsibilities, recognizing the process of discussion and compromise in group research that goes beyond simple task delineation. Groups will discuss their strengths and weaknesses, establish expectations, collaborate on an inquiry question based on the given stimulus materials, and select unique lenses and perspectives for each unique group member. Students will individually investigate their lens, seeking out multiple perspectives in the completion of annotated bibliographies. This task serves to practice research skills from the guided practice of Module 3 and adds the dynamics of collaboration and further narrowing in Module 4. Module 5 further extends to new skills, including an introduction to literature reviews and publication formatting (MLA, APA, Chicago), and culminates in response reflections looking for areas of agreement and disagreement across lenses and perspectives in the group. This exercise will provide scaffolding for a single collaborative statement, which will be the first step of Module 7 when students return to this content for group argumentation and presentation building (thus, completing a full practice of Task 1 and many of the overlapping skills of Task 2).

Suggested Time: 4-5 weeks

Suggested Content: Humanity and Technology—Good, Bad, Ugly

- Selections from Henry David Thoreau’s *Walden*
- Study, “Design and Development of Virtual Reality-Based Mobility Training Game for People With Parkinson’s Disease” published in *frontiers in Neurology* (2021)
- TEDx lecture, “The danger of AI is weirder than you think” (2019)
- Article, “Computers Do Not Make Art, People Do” published by the Association for Computing Machinery (2020)
- Article, “Beyond Asimov: The Three Laws of Responsible Robotics” published by *Human-centered Computing* (2009)
- Audio news (with transcript), “A Ukrainian Twitch influencer’s community rallied around him when Russian invaded” aired by NPR (2022)
- Study, “The collaborative work experience of robotics and human workers in the automobile industry in South Africa” published in the *African Journal of Science, Technology, Innovation and Development* (2020)
- Can substitute sample texts of articles and studies specific to CTE pathway(s)

Assessments: Group Formal Research Proposal (with inquiry question, research plan, and collection of individual annotated bibliographies); Individual Literature Review (with rubric feedback)

Module 5 Essential Questions

- What do I want to know, learn, or understand?
- What questions have yet to be asked?
- What contributions can I offer to a team?
- How does my research question shape how I go about trying to answer it?
- What information do I need to answer my question?
- What keywords should I use to search for information about this topic?
- What patterns or trends can I identify among the arguments about this issue?
- From whose perspective is this information being presented, and how does that affect my evaluation?
- How can I explain contradictions within or between arguments?
- What are the implications of these arguments?
- What are the implications and consequences of accepting or rejecting a particular argument?
- How does this conclusion impact my community and me? Or my research?
- How can I benefit from reflecting on my work?
- What is the best way to acknowledge and attribute the work of others used to support my argument?
- How can I avoid committing plagiarism?