

# **High School Gifted and Talented (G/T) Independent Research and Intern/Mentor Program Curriculum**

## **1. Introduction to Academic Research**

**Outcomes: Students will be able to...**

- Articulate the purpose and significance of academic research.
- Explore the characteristics, language, and purpose of various research methods.
- Identify and contextualize a problem or issue based upon a topic of interest.
- Engage in the creative problem solving process.

## **2. Review of the Literature and Development of a Research Question**

**Outcomes: Students will be able to...**

- Access and manage information in a wide variety of formats and acquisition methods.
- Evaluate the relevance, credibility, and bias of the source of information and data in relation to the inquiry.
- Build a foundation of knowledge through reading extensively and critically in order to determine central ideas or themes.
- Attribute knowledge and ideas accurately and ethically, using an appropriate citation style.
- Develop an annotated bibliography that summarizes and evaluates source information pertaining to the research.
- Formulate a well-reasoned argument, taking the complexities of the problem or issue into consideration in support of a well-constructed thesis.
- Synthesize, analyze, and evaluate the current research in a cohesive academic paper, considering audience, context and purpose.
- Adhere to established conventions of grammar, usage, style and mechanics.
- Engage in peer review to provide constructive responses to one another's work and to support the revision of their own writing, thinking, and creative processes.
- Identify content experts and network in a professional manner, both in written and oral communications.
- Consult with content experts to build additional foundational knowledge as well as to identify gaps in the research that may lead to further research possibilities.
- Pose questions and seek out answers that reflect multiple, divergent or contradictory viewpoints.
- Propose an original research question and preliminary hypothesis.

### **3. Scholarly Research**

#### **Outcomes: Students will be able to...**

- Determine the appropriate research methodology and data collection method to develop new understandings of the research question.
- Use the Creative Problem Solving process while developing a research proposal.
- Design, plan, and implement a scholarly inquiry.
- Employ ethical research practices, including protocols of data collection.
- Recognize the implications and limitations of the research.
- Collect, analyze, and interpret data using appropriate tools and methods.
- Articulate results and recommend solutions.
- Demonstrate perseverance through setting goals, managing time, and working independently on a long-term investigation.

### **4. Presentation and Application of the Research**

#### **Outcomes: Students will be able to...**

- Present research findings orally, organizing the information clearly and logically with attention to the needs of the audience and purpose.
- Compile a polished, professional electronic portfolio that reflects the academic research process.
- Apply the research in an appropriate context (e.g. original product, creative production, oral defense).