

High School G/T Independent Research and G/T Intern Mentor Program Essential Curriculum

UNIT I: The Nature of Research

Goal 1. The student will demonstrate the ability to choose topics worthy of research.

Objectives - The student will be able to:

- a. Define research and distinguish what is not research.
- b. Describe how research contributes to a body of knowledge.
- c. Demonstrate perseverance, resourcefulness, and initiative.
- d. Draft a preliminary research plan.
- e. Use metacognitive skills to reflect on continuing research.

UNIT II: Research Skills

Goal 1. The student will demonstrate the ability to practice critical thinking skills.

Objectives - The student will be able to:

- a. Evaluate evidence/arguments.
- b. Interpret and analyze data.
- c. Develop a personal viewpoint.
- d. Explore similarities and differences.

Goal 2. The student will demonstrate the ability to select the appropriate research design from a range of examples.

Objectives - The student will be able to:

- a. Recognize, identify, and use research terminologies correctly.
- b. Study research designs.
- c. Follow protocols of data collection and communication with researchers.

Goal 3. The student will demonstrate the ability to practice networking skills.

Objectives - The student will be able to:

- a. Access additional professionals.
- b. Access expertise of teachers and students outside of home school.
- c. Explore supplementary professional opportunities.
- d. Collect knowledge.

UNIT III: The Knowledge Base

Goal 1. The student will demonstrate the ability to build a knowledge base.

Objectives - The student will be able to:

- a. Recognize the patterns in which knowledge is organized.

- b. Locate and use print, non-print, and human resources.
- c. Use technology in the research process.
- d. Build a foundation of knowledge through extensive reading.
- e. Outline and take notes on research.
- f. Vary the writing style to suit the purpose of the material and audience.

Goal 2. The student will demonstrate the ability to present a written accumulation of knowledge.

Objectives - The student will be able to:

- a. Summarize and critique collected research.
- b. Create an annotated source list or bibliography.
- c. Assess the quality, validity, and reliability of information.
- d. Focus on subject for research.

UNIT IV: Research Focus

Goal 1. The student will demonstrate the ability to focus the research base.

Objectives - The student will be able to:

- a. Choose and use a time management system.
- b. Examine bibliographies for patterns, trends, and personal interests.
- c. Interview content area experts for research projects and controversial topics.
- d. Anticipate problems and propose solutions while narrowing a topic.
- e. Draft the research proposal.

UNIT V: Research Synthesis

Goal 1. The student will demonstrate the ability to evaluate, organize, and synthesize accumulated knowledge to support an original thesis.

Objective – The student will be able to:

- a. Review the literature to develop an original thesis.
- b. Evaluate and organize accumulated knowledge as it relates to the original thesis.
- c. Synthesize the evaluated knowledge into a coherent discussion of the original thesis.
- d. Write a synthesis paper that analyzes and evaluates the current research relevant to the original thesis.

UNIT VI: Scholarly Research

Goal 1. The student will demonstrate the ability to create new knowledge.

Objectives – The student will be able to:

- a. Propose an original research question.
- b. Select an appropriate methodology.
- c. Finalize the research proposal for original research.
- d. Conduct research.
- e. Collect, analyze, and interpret data.
- f. Recommend solutions and articulate results.
- g. Write an abstract.

UNIT VII: Research Presentation

Goal 1. The student will demonstrate the ability to evaluate and present the process to an established audience.

Objectives - The student will be able to:

- a. Demonstrate oral and visual communication skills.
- b. Evaluate the research and product with a content expert.
- c. Edit and finalize the product for delivery.
- d. Present the research and product, and collect feedback/evaluations.
- e. Evaluate the relevance of acquired knowledge with the G/T Resource Teacher.

Goal 2. The student will demonstrate the ability to present research using artifacts from the portfolio.

Objectives - The student will be able to:

- a. Select items for a portfolio, which represent acquired skills.
- b. Revise and update all entries.
- c. Reflect on the research process.
- d. Compile a professional, polished portfolio.
- e. Present portfolio and receive feedback from multiple audiences.

UNIT VIII: The Successful Intern-Mentor Experience

Goal 1. The student will demonstrate the ability to identify workplace expectations.

Objectives - The student will be able to:

- a. Demonstrate punctuality and consistent attendance.
- b. Communicate responsibly in the workplace.
- c. Persevere to see a task through.
- d. Summarize legislation regarding harassment and liability.
- e. Recognize the importance of:
 - Dress code
 - Confidentiality
 - Professional behavior.

Goal 2. The student will demonstrate the ability to show initiative.

Objectives - The student will be able to:

- a. Seek experiences and resources.
- b. Share course assignments with mentor.
- c. Demonstrate evidence of on-going research.
- d. Develop questions based on research and observations.