

## AN INDUSTRIAL RELATED RESEARCH REPORT

(To be used in conjunction with the assessment developed for Standard 5B.I)

### Performance Standard 5A.I

The student will survey an industrial occupation related subject, select a topic, narrow the focus to a specific set of questions and conduct research to find the information needed to answer the research questions. The student will write a multi-paragraph report using the information accordingly:

#### Research Process

- *Developing research design/questions:* develop the central research question; answer the central research question in the report thesis; develop answers to the central research question through supporting questions; answer the supporting questions in the outline of body paragraphs.
- *Developing research technique:* locate sources of information; document each source; paraphrase or quote supporting information.

#### Research Report

- *Developing documentation format:* include required information in works cited/bibliography entries; use correct format parenthetical notation in the report; follow the proper format and placement in the text.
- *Integrating sources:* use proper introductions and explanations for included information; support both the topic sentence of the paragraph and the thesis of the report with the included information.

#### Procedures

1. *In order to locate, organize and use information from various sources to answer questions, solve problems and communicate ideas (5A)*, students should experience sufficient learning opportunities to develop the following:

- Survey, with minimal guidance, a subject and select a topic.
- Distinguish among kinds of information needed to solve a problem, present possible solutions or extend information about a topic or problem (e.g., fact/opinion, examples/evidence).
- Apply criteria for determining the credibility of multiple sources of information. (Assessed in Standard 5B.I)
- Organize information for different formats (e.g., narrative report, data analysis).
- Follow appropriate style manual accurately (e.g., APA, MLA).

Literature related to various industrial occupations is available in many forms. Students need to be aware of sources available. Being able to read and write reports based upon the research of such documents is important. Collecting, analyzing for accuracy, and organizing this information into a report will assist industrial occupations students throughout life as they pursue life-long learning in their career field. This assessment aligns with Illinois Workplace Skill D4 (Communicating on the Job/Prepare written communication).

2. Have industrial occupations students review and discuss the assessment task and how the rubric will be used to evaluate their work.
3. The student will be familiar with techniques for gathering and evaluating information.
4. The student will have completed an orientation to available resources and technology.
5. The student will be familiar with ways to formulate research questions.
6. The student will be familiar with the purposes for writing (e.g., persuasion, cause/effect, argumentation).
7. The student will be familiar with a standard format for documentation (e.g., MLA, APA).
8. Prepare a set of industrial related research topics from which reports will be generated. These topics might include:
  - a. Trends in Home Construction in the Past Twenty Years
  - b. How Computers Have Changed Automobiles
  - c. Increasing Use of Plastics in Auto Body Repair
  - d. Metalworking As a Career in Illinois
  - e. Union VS. Non-Union Labor in the Construction Industry
  - f. Plastics Then and Now – How the Use of Plastics Has Changed the Industrial World
  - g. Owning Your Own Industrial Related Business(Note: Research topics may be brainstormed with the class.)

9. Each student will receive a technical assignment that involves researching a question, problem or situation that requires an action or response.
10. Using available resources, the student will develop research questions to guide inquiry, answering those questions by researching the industrial occupations related subject and recording his/her findings using an appropriate system for recording and documenting information.
11. Once the technical research is complete, the student will write a research report or documented essay to answer the question, solve the problem or communicate the results of his/her inquiry, according to the requirements of the assignment.
12. Evaluate each student's performance using the rubric. Add each student's scores to determine the performance level.

**Examples of Student Work**

- [Meets](#)
- [Exceeds](#)

**Time Requirements**

- Three to five weeks, depending on the length and complexity of the task assigned
- Actual class time allotted to the assignment should be five to eight periods

**Resources**

- Copies of the documentation format
- Available technology for researching sources and writing the report
- A guide to available resources in the school or community (optional)
- An Industrial Related Research Report Rubric

## AN INDUSTRIAL RELATED RESEARCH REPORT

NAME \_\_\_\_\_ DATE \_\_\_\_\_

- Exceeds standard (must receive 15 - 16 total points)       Approaches standard (must receive 7 - 10 total points)  
 Meets standard (must receive 11 - 14 total points)       Begins standard or absent (must receive 4 - 6 total points)

	Research Process		Research Report	
	Research Design/Questions	Research Technique	Documentation Format	Integration of Sources
<b>4</b>	<ul style="list-style-type: none"> <li>Central research question is clearly worded; the report thesis clearly and accurately answers the central research question.</li> <li>Supporting questions develop answers to the central research question.</li> <li>Outline of body paragraphs clearly and accurately answer the supporting questions.</li> </ul>	<ul style="list-style-type: none"> <li>Student locates five or more sources of information.</li> <li>Student records all necessary information to properly document each source.</li> <li>All supporting information is properly paraphrased or quoted directly.</li> </ul>	<ul style="list-style-type: none"> <li>All works cited/ bibliography entries consistently contain required information.</li> <li>Consistently uses correct format.</li> <li>Parenthetical notation in the report follows the proper format and placement in the text.</li> </ul>	<ul style="list-style-type: none"> <li>All information is inserted in the report with proper introductions and explanations.</li> <li>All information supports both the topic sentence of the paragraph and the thesis of the report.</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>Central research question is clearly worded; the thesis can be developed from the question with some minor revision/editing.</li> <li>Supporting questions usually develop answers to the central research question. One question may not develop a necessary supporting point.</li> <li>Outline usually answers the supporting questions.</li> </ul>	<ul style="list-style-type: none"> <li>Student locates four sources of information.</li> <li>Student usually records necessary information for proper documentation of each source.</li> <li>Supporting information is usually paraphrased or quoted properly.</li> </ul>	<ul style="list-style-type: none"> <li>Works cited/ bibliography entries usually contain required information. Some minor information may be missing or inaccurate.</li> <li>Usually uses correct format.</li> <li>Parenthetical notation usually follows correct format and placement in the text.</li> </ul>	<ul style="list-style-type: none"> <li>Most information is inserted in the report with proper introductions and explanations.</li> <li>Most information supports both the topic sentence of the paragraph and the thesis of the report.</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>Central research question is not clearly worded; thesis sentence is developed from the question only with considerable revision/editing.</li> <li>Supporting questions occasionally develop answers to the central research question.</li> <li>Outline occasionally answers supporting questions.</li> </ul>	<ul style="list-style-type: none"> <li>Student locates two or three sources of information.</li> <li>Student records some necessary information for proper documentation of the source.</li> <li>Supporting information may be inaccurately paraphrased or quoted.</li> </ul>	<ul style="list-style-type: none"> <li>Works cited/ bibliography entries occasionally contain required information. Some significant information may be missing or inaccurate.</li> <li>Occasionally uses correct format.</li> <li>Some parenthetical notations in the report contain erroneous information or cite the wrong source.</li> </ul>	<ul style="list-style-type: none"> <li>Some information is inserted in the report with proper introductions and explanations.</li> <li>Some information does not support the topic sentence of the paragraph or the thesis of the report.</li> </ul>
<b>1</b>	<ul style="list-style-type: none"> <li>Central research question is vaguely worded or absent.</li> <li>Supporting questions may develop one or none of the answers to the central research question.</li> <li style="text-align: center;">OR</li> <li>Supporting questions absent.</li> <li>Outline does not answer supporting questions.</li> </ul>	<ul style="list-style-type: none"> <li>Student locates one or no source of information.</li> <li>Student records little or no necessary information for proper documentation of the source.</li> <li>Supporting information is recorded inaccurately.</li> <li style="text-align: center;">OR</li> <li>Supporting information is absent.</li> </ul>	<ul style="list-style-type: none"> <li>Works cited/ bibliography entries contain little or no required information.</li> <li>Seldom or never uses correct format.</li> <li>Parenthetical notations in the report are misplaced, contain information errors or are absent.</li> </ul>	<ul style="list-style-type: none"> <li>Little or no information is inserted in the report with proper introductions and explanations.</li> <li style="text-align: center;">OR</li> <li>Information is absent.</li> <li>Little or no information supports the topic sentence of the paragraph or the thesis of the report.</li> <li style="text-align: center;">OR</li> <li>Support is unclear or missing.</li> </ul>
<b>Score</b>				