





Global Projects Preparation: Infusing Information Literacy into Project-Based Curricula

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Worcester Polytechnic Institute

- Founded in 1865 as Worcester County Free Institute of Industrial Science as nation's thirdoldest private independent technological university
- More than 50 project-based undergraduate and graduate degree programs in science, engineering, technology, management, social sciences, and humanities and arts
- 2,861 undergraduates/1042 graduate students/324 faculty

Interdisciplinary and Global Studies Division

 Responsible for overseeing the Interactive Qualifying Project (IQP) and the Global Perspective Program.



Project Centers in the World





Gordon Library

- The library partners with the WPI community in teaching, learning, and scholarship by providing resources and innovative services that anticipate and respond to changing information needs.
- IT Liaison program librarians & academic technologists partner to provide support to academic departments



Interactive Qualifying Project

- Course requirement equivalent in credit to 3 courses
- Interdisciplinary team project that helps students understand how science and technology impact society
- 2/3 of undergraduates complete in 7-weeks at Project Centers worldwide
- Project teams: 3-5 students who work with advisor(s) and sponsor





Outcomes – Related to Information Literacy

Students who complete an Interactive Qualifying Project will:

- Critically identify, utilize, and properly cite information sources, and integrate information from multiple sources to identify appropriate approaches to addressing the project goals
- Analyze and synthesize results from social, ethical, humanistic, technical or other perspectives, as appropriate.
- Demonstrate the ability to write clearly, critically and persuasively. Demonstrate strong oral communication skills, using appropriate, effective visual aids.
- Demonstrate an awareness of the ethical dimensions of their project work.

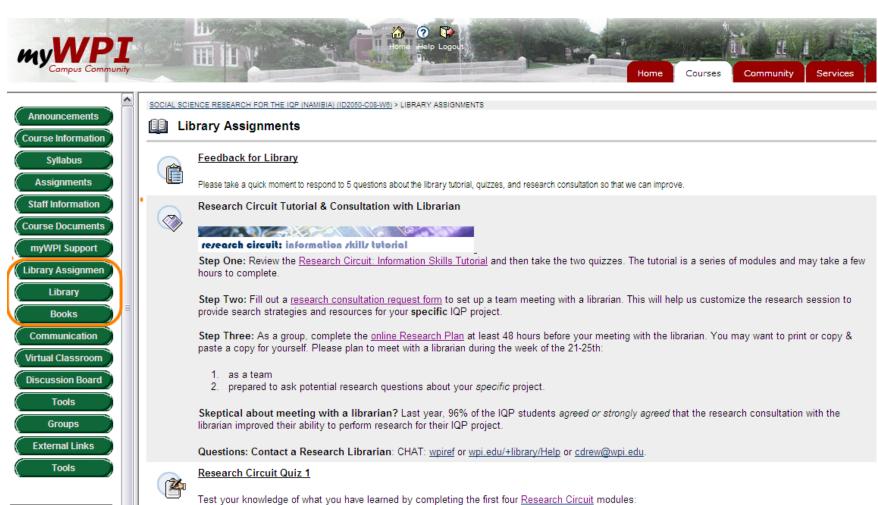
Complete list of IQP outcomes ...

Research Methods Course

- ID2050: 7-week preparation course prior to off-site project experience
- As part of this course, Project Center librarian liaisons partner with faculty to:
 - Embed research skills tutorials & information resources into Blackboard
 - Offer team research consultation
 - Offer training on citation management tools



Research Skills Tutorials



Course Tools

Communication

Course Tools
Course Map

Starting Smart
 Developing a Topic

. Finding Books: Using the Library Catalog

Finding Articles



Research Consultations

- Student teams complete preliminary <u>Research</u>
 <u>Plan</u> prior to 1 hour meeting with librarian
- Librarians use standard research plan template during customized consultation



Consultation Outcomes

Students learn to:

- choose and evaluate appropriate information resources for their project
- search effectively utilizing Boolean and appropriate keywords or subject headings within Internet search engines and specialized databases
- find and obtain a wide range of information sources as appropriate, such as books, academic papers, review articles, handbooks, case studies, technical reports, and government information
- identify experts and pertinent organizations in order to track down specialized information
- use information ethically by appropriate documentation and begin to understand when copyright permission is needed, and how to obtain it.

Assessment of IL Skills

Student self-evaluations

- 96% of the students agreed or strongly agreed that the research consultation with the librarian improved their ability to perform research
- 63% percent agreed or strongly agreed that the Research Circuit online tutorial improved their ability to perform research for the IQP project



Faculty Perceptions of Student Performance

- All agreed or strongly agreed that due to instruction by the librarians their students were able to find more academic or scholarly information.
- All agreed that the library's online tutorial and consultation with the research librarian helped the students produce higher quality work.
- Most felt that the students were more competent creating bibliographies due to working with the librarians



Future Directions

- Improving online tutorial to include interactivity
- Work with faculty to develop rubric to assess background chapters based on <u>post-project</u> <u>review criteria</u>
- Possible citation analysis of project bibliographies



IQP REVIEW FORM

Summer 2007

Reviewer: Basic Information:								
Advisor of Record:	Advisor's Dept.	Project Sponsor: (if any)						
Co-Advisors and Department	S:	Team Size:						
Student Majors: Registration by Term (units o	r thirds) A B	C D E						

PROJECT REPORT

Please rate and, where appropriate, comment on the quality and adequacy of the following components and aspects of the project report: (A = absent, 1 = poor, 3 = acceptable, 5 = excellent)

1. PROJECT OBJECTIVE/INTRODUCTION/EXECUTIVE SUMMARY

a) Project Objective (Completeness,	, Clarity):	\mathbf{A}	1	2	3	4	5
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