

Update on MQP and IQP Outcomes Assessment

March 6, 2023

Undergraduate Outcomes Assessment Committee (UOAC)

Andrea Arnold (MA)

Chrys Demetry (Morgan Teaching and Learning Center) – ex officio

Soroush Farzin (CEAE)

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Adrienne Hall-Phillips – CAP Appointee

Melissa Leahy (IR) – ex officio

Kate McIntyre (HUA)

Doug Petkie (PH) – Chair

Kent Rissmiller (Global School) – Provost's Appointee

UOAC's Role and Responsibilities

As a permanent subcommittee of CAP (Committee on Academic Policy), UOAC is charged with:

- a. "proposing policy with regard to WPI's undergraduate learning outcomes
- b. identifying and facilitating procedures for assessing those outcomes
- c. coordinating outcomes assessment activities on campus
- d. communicating assessment results
- e. formulating academic policy recommendations based on its assessment activities"

"The Committee is not responsible for the assessment of departmental majors or programs, but for the identification and assessment of learning outcomes that arise from the undergraduate curriculum broadly defined, including assessment of the first year program." (Faculty Handbook)

Three Main Takeaways

1. We have undergraduate learning outcomes, MQP learning outcomes, and IQP learning outcomes.
2. Data from Student Reports on IQP and MQP Learning and Advising are now accessible.
3. Advisor Reports on IQP and MQP Learning are being redeployed on eProjects, and we have a collective responsibility to complete them

all are important for our institution-level and program-level outcomes assessment processes

WPI's Undergraduate Learning Outcomes

Graduates of WPI will:

1. have a **base of knowledge in mathematics, science, and humanistic studies**
2. have mastered **fundamental concepts and methods** in their principal areas of study
3. understand and employ current **technological tools**
4. be effective in oral, written and visual **communication**
5. function effectively both **individually and on teams**
6. be able to **identify, analyze, and solve problems creatively** through sustained critical investigation
7. be able to make **connections between disciplines and to integrate information** from multiple sources
8. demonstrate **global and intercultural competency** by developing the capacity to identify, explain, and critically analyze the forces (such as cultural, historical, political, economic) that shape the self and others as they engage with local and global communities
9. be aware of personal, societal, and professional **ethical standards**
10. have the skills, diligence, and commitment to excellence needed to engage in **lifelong learning**

Intentional Design for Learning

		Degree Requirements and Other Learning Experiences				
		MQP	IQP	HUA	Courses	Extracurricular
Learning Outcomes	Base in MA, SCI, HU			X		
	Concepts and methods in major	X				
	Understand and employ technological tools	X				
	Communication	X	X	X		
	Individual and team functioning	X	X			
	Identify, analyze, and solve problems creatively	X	X	X		
	Connections between disciplines and integrating information		X	X		
	Global and intercultural competency			X		
	Ethical standards	X	X	X		
	Lifelong learning	X	X	X		

MQP Learning Outcomes
IQP Learning Outcomes

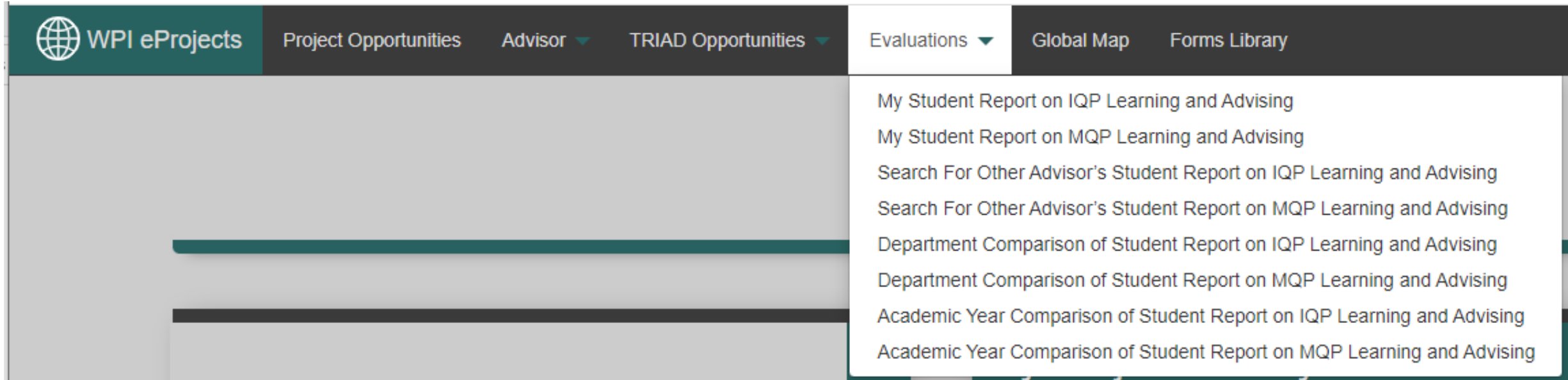
Assessment of Learning in IQPs and MQPs: Triangulating Data Sources



Student Reports on IQP and MQP Learning and Advising

- Two sets of questions: 1) progress on LOs (experience); 2) advisor behaviors
- Uses
 - By project advisors for self-improvement, P&T evidence
 - For program review, institutional learning across programs, key data source in Undergraduate Outcomes Assessment Plan
- Integrated into project submission/CDR process
- High completion rate
- Two places to access data – access rules approved by faculty
 - eProjects Evaluations - "My IQP/MQP Surveys" includes comments – seen only by you
 - Tableau – more historical data than eProjects, but no comments

Where to Find Student Report Data on eProjects.wpi.edu



The image shows a screenshot of the WPI eProjects website navigation bar. The navigation bar is dark grey with a teal header on the left containing the WPI eProjects logo. The main navigation items are: Project Opportunities, Advisor, TRIAD Opportunities, Evaluations, Global Map, and Forms Library. The 'Evaluations' dropdown menu is open, showing the following options:

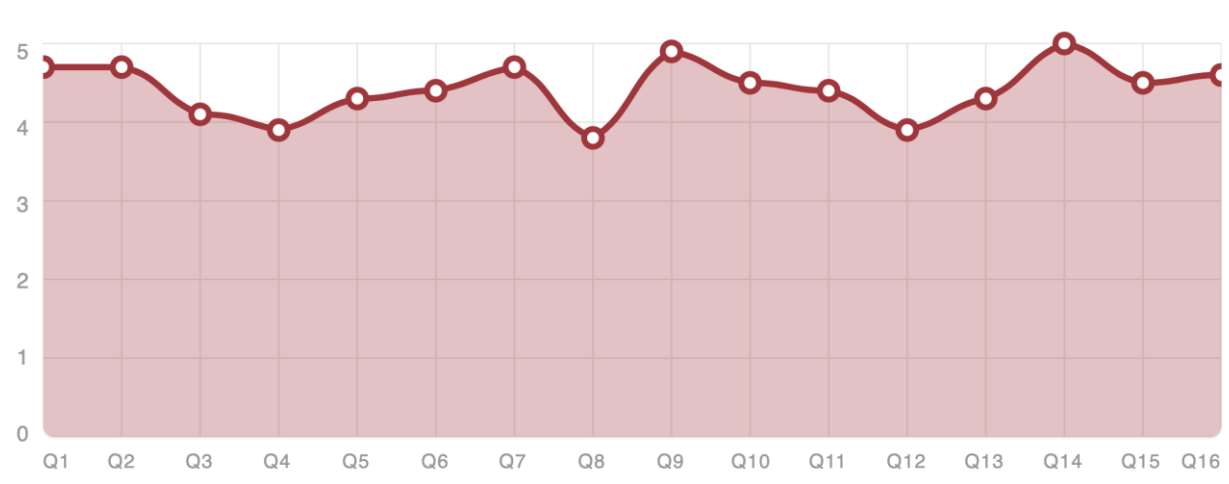
- My Student Report on IQP Learning and Advising
- My Student Report on MQP Learning and Advising
- Search For Other Advisor's Student Report on IQP Learning and Advising
- Search For Other Advisor's Student Report on MQP Learning and Advising
- Department Comparison of Student Report on IQP Learning and Advising
- Department Comparison of Student Report on MQP Learning and Advising
- Academic Year Comparison of Student Report on IQP Learning and Advising
- Academic Year Comparison of Student Report on MQP Learning and Advising

My MQP Evaluations

All Academic Years ▾

Experience Advisor Comments

7 MQP Post Project Evaluations were found for projects that you advised.



Q1	Applying Fundamental and disciplinary concepts and methods specific to my major.	4.7
Q2	Demonstrating skill and knowledge of current technological tools and techniques relevant to my major.	4.7
Q3	Developing skill in written communication.	4.1
Q4	Developing skill in oral expression and public speaking.	3.9
Q5	Developing skill in visual communication (i.e., use of images and graphics to convey information, data, and ideas).	4.3
Q6	Identifying, analyzing, and solving problems creatively through sustained critical investigation.	4.4
Q7	Finding, critically evaluating, and integrating information and ideas from multiple sources.	4.7
Q8	Understanding and applying ethical standards in my field (for example, human and animal rights in research, respect for intellectual property, social and environmental responsibility, honest reporting of data, sensitivity to conflict of interest).	3.8
Q9	Taking responsibility for my own learning and project direction.	4.9
Q10	My progress in working with others as a member of a team (leave blank if not applicable).	4.5

Department Report of Student MQP Evaluations

AY 2021-2022 ▼

= Below Average
 = Average
 = Above Average

MQP Experience

Department	n	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
WPI Average	1230	4.63	4.62	4.47	4.14	4.41	4.65	4.6	3.95	4.76	4.66	4.4	4.07	4.09	4.54	4.69	4.55
ME	258	4.61	4.6	4.46	4.2	4.41	4.68	4.57	4	4.76	4.68	4.4	4.08	4.17	4.53	4.67	4.51
CS	186	4.65	4.66	4.3	3.67	4.15	4.45	4.41	3.51	4.71	4.54	4.34	3.85	3.85	4.39	4.66	4.43

Student Evaluations of Their MQP Advisors

Department	n	AQ1	AQ2	AQ3	AQ4	AQ5	AQ6	AQ7	AQ8	AQ9	AQ10	AQ11	AQ12
WPI Average	1230	4.58	4.71	4.48	4.49	4.27	4.4	4.56	4.21	4.21	4.33	4.26	4.46
ME	258	4.47	4.62	4.3	4.33	3.98	4.23	4.46	4.1	4.02	4.17	4.13	4.25

Advisor IQP Report

Please type in the name or username of the advisor you'd like to see an evaluation report for.

 Search Advisors

Evaluations ▾

Global Map

Forms Library

My Student Report on IQP Learning and Advising

My Student Report on MQP Learning and Advising

Search For Other Advisor's Student Report on IQP Learning and Advising

Search For Other Advisor's Student Report on MQP Learning and Advising

Department Comparison of Student Report on IQP Learning and Advising

Department Comparison of Student Report on MQP Learning and Advising

Academic Year Comparison of Student Report on IQP Learning and Advising

Academic Year Comparison of Student Report on MQP Learning and Advising

Advisor IQP Report

Please type in the name or username of the advisor you'd like to see an evaluation report for.

 Deme

jdemetry

Chrys Demetry (cdemetry)

Michael Demetriou (mdemetri)

Additional Student Report Data on Tableau

(link will also be distributed by email)

<	Title	MQP Experience Evaluations	MQP Advisor Evaluations	IQP Experience Evaluations	IQP Advisor Evaluations	MQP Experience Evaluations - Prior to Fall 2019	IQP Experience Evaluations - Prior to Fall 2019	IQP Advisor Evaluations - Prior to Fall 2019	>
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WPI

Student Reported IQP & MQP Evaluations

Prepared by the Office of Strategic Initiatives & University Analytics



Student Reported IQP Advisor Evaluations

In the following table, 1 = Very poor, 3 = Average, and 5 = Excellent



Advisor Name

(All) ▼

Survey Completion Date

(All) ▼

Project Location

(All) ▼

[Reset Filters](#)

	Avg.	Count	Std. Dev.
The advisor's personal interest in helping students learn	4.38	5,185	0.95
The advisor's treatment and respect for students	4.30	5,186	1.09
The advisor's helpfulness in fostering good professional habits	4.20	5,177	1.07
The advisor's encouragement of creativity in meeting project goals and needs	4.22	5,171	1.02
The advisor's facilitation of team functioning (if applicable)	4.03	4,706	1.15
The advisor's ability to challenge me in a constructive manner	4.05	5,171	1.14
The advisor's creation of an atmosphere of trust	4.13	5,168	1.19
The advisor's articulation of expectations and grading criteria	3.81	5,164	1.24
The advisor's feedback on my work	4.04	5,173	1.13
The advisor's timeliness in responding to my work	4.20	5,168	1.08
Overall, I rate the advisor's effectiveness as	4.11	5,173	1.10

Advisor Reports on IQP and MQP Learning

- Your assessment of level of achievement on each IQP/MQP LO, for each student on team
- Used by degree programs and UOAC for outcomes assessment
- Integrated into project approval/CDR process
- **Right now can only be completed during approval/CDR workflow.** Return/reminder mechanism under development.
- In a co-advised project, only one advisor will be prompted to complete the survey– whoever approves and grades the project

Advisor Report Interface on eProjects



Project Submission Workflow

To move this submission to a different step in the process, select an action below.

Optionally leave a note or comment (visible to project students, advisors, and registrar staff).

Do not notify

Prevents sending emails to project members and advisors regarding this transition. This option is only visible to administrators.

Send from Archived to Library (Admin)

Please fill out your **Advisor Report on MQP Learning**.

For complete information on the submission process, see the **[IQP/MQP Submission Documentation](#)** or **[The Hub](#)**. If you have questions during the process, please contact its@wpi.edu.

Advisor Reported MQP Survey

View Test Results Build Settings References Export



Advisor Report on MQP Learning

By providing your assessment of student achievement of MQP learning outcomes, you are contributing to our collective responsibility to continuously assess and improve student learning in this important degree requirement. The data will be used to focus improvement efforts in areas of need identified by faculty members who advise MQPs. These data will not be used to evaluate MQP advising or rank MQP advisors. We realize that there are many factors in addition to advising that contribute to learning outcomes, and even an outstanding student may not be exceptional in all of the learning outcomes.

A note on confidentiality: While advisors are encouraged to discuss achievement of learning outcomes with students as part of the feedback and grading process, these Advisor Report data will not be shared with your project students. The Dean of Undergraduate Studies will report data only in summary form at the institute and program levels. Department and program heads will be told which of their faculty members completed Advisor Reports, but they will not be given learning outcomes data at the advisor level.

GID

If you encounter any problems with your survey, please include the number below with your support ticket.

25246

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Advisor Reported MQP Survey

View

Test

Results

Build

Settings

References

Export



Information relevant to all students on the project:

Will the project report be presented to an external organization?

Yes



Was this project co-advised by another WPI faculty member?

No



Did the students meet with an external organization during the project?

Yes



Was financial support provided by an external organization?

No



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Advisor Reported MQP Survey

View Test Results Build Settings References Export



Please interpret the rating scale as follows:

Unacceptable: Does not meet expectations, serious weaknesses are evident for a college graduate

Acceptable: Meets expectations for a college graduate

Exceptional: Equivalent to outstanding work at the early graduate or professional level

N/A: If the outcome is not applicable to this particular project or if you have no information by which to make an assessment.

For projects with more than 4 students you may need to scroll to the right to see all options

Batch score

Student names will be listed

1. Applying fundamental and disciplinary concepts and methods specific to the major

- None -

- None -

2. Skill and knowledge of current technological tools and techniques relevant to the major

- None -

- None -

3a. Skill in written communication

- None -

- None -

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All are important for our institution-level and program-level outcomes assessment processes.

What are your questions?

THANK YOU to staff contributors:

- Robert DeVecchio, Ermal Toto, and the rest of the eProjects development team in IT
- Dan Richards and Monelle Verdolino – IR Office