



Open Pathway Quality Initiative Report

Institutional Template

The enclosed Quality Initiative Report represents the work that the institution has undertaken to fulfill the Improvement Process of the Open Pathway.

A handwritten signature in black ink that reads "Bernie Patterson".

July 10, 2018

Signature of Institution's President or Chancellor

Date

Bernie Patterson, Chancellor

Printed/Typed Name and Title

The University of Wisconsin-Stevens Point

Name of Institution

Stevens Point, Wisconsin

City and State

The institution uses the template below to complete its Quality Initiative Report. The institution may include a report it has prepared for other purposes if it addresses many of the questions below and replaces portions of the narrative in the template. This template may be used both for reports on initiatives that have been completed and for initiatives that will continue and for which this report serves as a milestone of accomplishments thus far. The complete report should be no more than 6,000 words.

Quality Initiative Reports are to be submitted by August 31 of Year 9. HLC recommends that institutions with comprehensive evaluations in the first half of Year 10 submit their report at least six months prior to their Assurance System lock date. Submit the report as a PDF file to pathways@hlcommission.org with a file name that follows this format: QI Report No Name University MN. The file name must include the institution's name (or an identifiable portion thereof) and state.

Date: July 10, 2018

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Report Categories

Overview of the Quality Initiative

1. Provide a one-page executive summary that describes the Quality Initiative, summarizes what was accomplished and explains any changes made to the initiative over the time period.

Our Quality Initiative (QI), “Developing and Assessing Critical Thinking at the University of Wisconsin-Stevens Point,” was designed to implement intentional critical thinking instruction using graphical representations of reasoning (i.e. argument maps) across both our General Education Program (GEP) and in majors that articulate critical thinking as an expected learning outcome.

We had initially planned to utilize small, disciplinary-specific groups of instructors to generate learning outcomes, activities, and assessments that could then be synthesized, generalized, and incorporated into the curriculum by fall of 2018. We discovered, however, that a more efficient and productive approach was provide substantive, but flexible, ideas to the larger, interdisciplinary group of participating faculty, and to modify these ideas in response to the feedback emerging from this group.

Institutional challenges, including the need to address our recent enrollment declines, and the news that UW-Stevens Point would be integrating with our nearby two UW Colleges campuses (UW-Marathon County and UW-Marshfield/Wood County) as part of a system-wide restructuring plan, led us to extend the timeline for any official implementation of a critical thinking component across our curricula. We will, instead, be conducting an ambitious pilot of critical-thinking-designated courses in the fall of 2018.

As detailed below, our accomplishments are many. We have conducted informative surveys and pre-tests, held numerous critical thinking workshops, given multiple presentations, and met with external stakeholders. These efforts have resulted in model of critical thinking that is both broad enough to accommodate a variety of disciplines, and substantive enough to generate assessable learning outcomes. We have developed a framework for critical thinking that can facilitate transfer of learning across the curriculum, and we are well on our way toward the construction of a library of instructional resources and assessment tools. This work will continue long after our QI has ended, and we look forward to advancing critical thinking instruction nationwide.

Scope and Impact of the Initiative

2. Explain in more detail what was accomplished in the Quality Initiative in relation to its purposes and goals. (If applicable, explain the initiative's hypotheses and findings.)

At its inception, the overriding goal of our QI was to improve the teaching and assessment of critical thinking at UW-Stevens Point by

1. developing a shared, cross-disciplinary understanding of critical thinking, grounded in argumentation theory and focused on developing reasoning skills through argument mapping,
2. enriching this common framework with discipline-specific content and reasoning skills, and
3. enabling the introduction, development, mastery, and assessment of critical thinking skills in a systematic way throughout our GEP and in those majors where critical thinking is an articulated learning outcome.

We proposed to reach this goal by drawing upon the expertise of our faculty and instructional academic staff through the formation small Faculty Exploration Groups (FEGs). In virtue of sharing disciplinary affinities and teaching interests and supported by members of the core critical thinking team (described below in III.6), these FEGs were to

1. identify the role that critical thinking plays in their subject areas,
2. craft and implement specific course activities and assignments that scaffold critical thinking instruction in their disciplines, and
3. develop a plan for assessing critical thinking in their discipline.

Guided by the insights and work of the FEGs, the core critical thinking team was to

1. synthesize a set of critical thinking learning outcomes that could be applied at various levels across the GEP curriculum,
2. develop lessons, learning activities, and assessment tools aligned with these outcomes, and
3. determine the training and support that would be provided to instructors who elected to implement this approach.

We anticipated that much of the curriculum development work would be accomplished during the 2016-2017 academic year, allowing us to fully implement argument mapping in our required introductory communication course (which had piloted the method in the spring of 2016) in the spring of 2017. Continued efforts, including a review of assessment data gathered from courses in the spring of 2017, were to have resulted in refinements to our approach and the full implementation of systematic critical thinking instruction using argument mapping across the Foundation Level of our GEP (e.g., oral and written communication, quantitative literacy, and wellness) in the fall of 2018.

In the process of enacting this plan, we learned a valuable lesson: faculty who are expert in their disciplines, master teachers, and keenly interested in incorporating explicit critical thinking instruction

into their courses, are not, by virtue of this expertise and interest, able to articulate clear critical thinking learning outcomes, or craft developmentally-appropriate learning activities and assessments aligned with these outcomes. We repeatedly heard from our small, discipline-focused FEGs that they both needed and wanted substantive input from members of the core critical thinking team. This proved to be such a common theme during the first few months of our QI that we feel justified in positing that any successful effort to infuse substantive critical thinking instruction across the curriculum requires active participation both from experts in critical thinking, who must propose an initial understanding of critical thinking, draft basic learning activities, and suggest assessment tools, and from subject matter experts, who must recommend changes to that framework to ensure that the resulting structure adequately captures critical thinking in their disciplines.

Adopting this approach, we disbanded the subject-specific FEGs in January 2017, in favor of holding a series of workshops in which members of the core critical thinking team assumed a more active role, proposing a broad critical thinking framework to the larger, inter-disciplinary group of interested faculty and progressively modifying this framework in response to continued feedback.

Members of the core critical thinking team also began to meet with local employers and presented our work at technical colleges to ensure that our understanding critical thinking is aligned with community and stakeholder needs.

This approach proved fruitful, and by the end of the 2016-2017 academic year, we had articulated a solid draft of our overarching critical thinking model. This model, which includes a definition of critical thinking, assessable critical thinking learning outcomes aligned with that definition, assessment rubrics, and a general framework for how the critical thinking outcomes might be addressed across the curriculum, was refined during the 2017-2018 academic year. In the fall of 2018, this model will be implemented in critical thinking pilot involving 35 instructors and 69 classes from 21 disciplines at virtually every curricular level ([Appendix 1](#)).

Reviewing our work to date, we are behind in our timeline: fall of 2018 will see a robust critical thinking pilot, but we will not yet have a fully-articulated critical thinking curriculum embedded within our GEP. What we have done, however, is more significant. To wit, we have crafted an internally and externally-vetted model of critical thinking that is substantive enough to generate meaningful learning outcomes, broad enough to encompass multiple disciplines and developmental levels, and flexible enough to encourage, without compelling, the use of graphical representations and other evidence-based teaching methodologies. This, we submit, represents a significant achievement that will meaningfully change the way critical thinking is taught at our institution and elsewhere.

3. Evaluate the impact of the initiative, including any changes in processes, policies, technology, curricula, programs, student learning and success that are now in place in consequence of the initiative.

As noted above, our QI has yielded a robust model of critical thinking that includes a definition of critical thinking and a set of assessable critical thinking learning outcomes. This model will guide our well-populated pilot of critical thinking designated courses in the fall of 2018. It will also ground a series of introductory, stand-alone, online critical thinking lessons that are currently under development for use in the pilot courses. Not only were these online lessons requested by the pilot instructors to relieve them of the need to teach foundational concepts and skills that lie outside their normal instructional experience, they will also provide a measure of consistency across the pilot that will facilitate transfer of learning, should the pilot eventually result in an official critical thinking curriculum that is scaffolded across our GEP. (Drafts of these lessons, and other materials, are included in appendices referenced below.)

A less tangible, but no less significant, outcome has been the elevation of conversations on campus about critical thinking. Despite a truly challenging year characterized by discussions about budgetary reductions and program realignment, participants in the critical thinking pilot project remained reliably engaged. It is now a regular occurrence for members of the critical thinking team to receive articles from their colleagues about critical thinking, to be stopped in the local coffee house to chat about issues related to critical thinking instruction, or to receive hopeful inquiries about the design of a critical thinking requirement within our general education curriculum. The informal communities of practice that have evolved around this notion show no sign of dissolution. Critical thinking is proving to be exactly what we need when we most need it: a common and uniting interest that can knit together our collective energies and direct them toward a positive, meaningful, and attainable end.

4. Explain any tools, data or other information that resulted from the work of the initiative.

Surveys and Test Results

In May 2016, we surveyed faculty interested in participating in the QI to better understand what critical thinking looked like in different fields, identify challenges to teaching critical thinking, and determine how we might help instructors meet those challenges. A summary analysis of the responses received is included as [Appendix 2](#).

In September 2016, after a faculty development workshop to kick-off the work of our Faculty Exploration Groups (FEGs), we administered another survey to determine the extent to which faculty thought graphical representations of reasoning (e.g. argument maps) would help them to teach critical thinking. The information from the twenty-four responses received is recorded in [Appendix 3](#).

In spring of 2017, we surveyed faculty participating in the QI to determine how valuable they were finding the work. The results were positive and endorsing and are discussed in Section III.6 below. A complete set of the responses may be found in [Appendix 4](#).

Spring of 2017 also witnessed the initial implementation of argument mapping in selected sections of our required oral communication course, COMM 101, and the administration of a pre-test and post-test both to students in sections that used argument mapping and to students in sections that did not use argument mapping. Because the sections of COMM 101 were taught by graduate students, and because we were unable to ensure a consistency of approach across the sections that used argument mapping, we have been cautious about extracting information from a comparison of post-test results between the treatment and control groups. An examination of the pre- and post-test results does, however, support our hypothesis that the ability to identify the conclusion of an argument is highly vulnerable to ordering effects: it is easier for students to identify conclusions that are stated after the supporting reasons than it is for them to identify conclusions that are stated before the supporting reasons. This may be because students are using narrative sequencing as a proxy for logical relationships or conflating narrative sequencing with logical relationships. Argument mapping, when systematically implemented, helps students avoid this natural tendency. Data from the pre- and post-tests, as well as the test questions, may be found in [Appendix 5](#).

Presentations

During the spring semester of 2016, on April 28 and May 4, we hosted informational sessions for instructors in order to present an overview of critical thinking and argument mapping, identify the most pressing challenges to embedding critical thinking instruction across the curriculum, and develop solutions to these challenges. Material from these presentations, along with the participant lists, may be found in [Appendix 6](#).

September 27, 2016, we held a kick-off presentation and workshop for the QI. The material from this event, including the participant list, may be found in [Appendix 7](#).

We held five training sessions on critical thinking instruction with argument mapping during the academic year 2016-2017. Material from these sessions (held on October 21, November 18, February 10, April 7, and May 5), and the participant lists, may be found in Appendices [8](#), [9](#), [10](#), [11](#), & [12](#).

During the fall semester of the 2017-2018 academic year, we held workshops on October 27, November 17, and December 15. The material and participant lists for these workshops are included as Appendices [13](#), [14](#) & [15](#).

In the spring semester of the 2017-2018 academic year, we held three training sessions for instructors participating in the critical thinking pilot. Material from these sessions (held on March 16, April 20, and May 11), and the participant lists, are included as included as Appendices [16](#), [17](#) & [18](#).

In addition to these sessions designed for UW-Stevens Point employees, we have shared our work with a wider audience, giving a workshop for community members in the summer of 2017 (the material for which may be found in [Appendix 19](#)), a workshop at Mid-State Technical College in July of 2017 ([Appendix 20](#)), two subsequent workshops at Gateway Technical College in the summer 2017 ([Appendices 21](#) and [22](#)), a presentation at the HLC's 2017 Annual Conference ([Appendix 23](#)) and another presentation at the HLC's 2018 Annual Conference ([Appendix 24](#)).

Instructional Materials

Over the course of the last two years, we have begun to build the library of materials necessary for the intentional infusion and assessment of critical thinking instruction across the curriculum. These materials include:

1. A definition of critical thinking that is supported by critical thinking scholarship, robust enough to generate assessable learning outcomes, and broad enough to accommodate a variety of disciplines.
2. A framework for critical thinking that provides a broader context within which instructors can situate the learning outcomes specific to their courses and to which instructors can refer to help students transfer learning from one course to another.
3. A list of essential critical thinking concepts and terms, with an indication of terminological differences across disciplines.
4. Lesson modules that instructors can use to supplement their instruction.
5. Rubrics and assessment tools to ease the evaluation of student work and to enable the aggregation of assessment results across disciplines.

At the time of this writing, our definition and framework are well developed. We include it in [Appendix 25](#). Our list of concepts and terms, [Appendix 26](#), is still in development, as are our lesson modules in and assessment tools.

5. Describe the biggest challenges and opportunities encountered in implementing the initiative.

Challenges

The challenges that we have encountered can be usefully divided into intrinsic and extrinsic challenges. Intrinsic challenges emerge from the concept of critical thinking, from the nature of academic disciplines, and from the ways in which higher education has been structured over its long history. They can be expected to appear whenever an institution attempts to integrate intentional critical thinking instruction across multiple disciplines within a university. Extrinsic challenges, on the other hand, stem from the circumstances that are currently affecting our specific institution.

Solutions to our extrinsic challenges are certainly essential to the success of our work, but their significance for other institutions is limited by the extent to which those other institutions share our situation. Solutions to the intrinsic challenges, on the other hand, stemming as they do from the nature of the project, have broader and deeper utility. Accordingly, we will discuss our extrinsic challenges first and then turn our attention to the intrinsic challenges that we discovered.

Extrinsic Challenges

The University of Wisconsin-Stevens Point is confronting a structural deficit that stems from reductions in state funding, an ongoing tuition freeze, and declining enrollment. We have also recently integrated with our two regional UW Colleges campuses, UW-Marathon County and UW-Marshfield/Wood County, both of which bring their own fiscal and enrollment challenges and staff of tenured faculty. These realities are prompting us to consider a variety of proposals to restructure and refocus the academic offerings of our institution. One proposal, which gained national attention, recommends the elimination of most majors in the humanities with concomitant investment in programs that, in virtue of having more explicit career paths, are more apt to attract students to campus and more able to directly serve communities in central Wisconsin. Predictably, the situation in which we find ourselves has elevated tensions, lowered morale, and made it difficult to capture the focus and energy needed to move forward with an ambitious instructional initiative.

Fortunately, our faculty-led commitment to critical thinking pedagogy predated our QI, and a supportive, substantive, and interdisciplinary, group of instructors interested in this work was already well-established when the proposal for programmatic restructuring was released to campus in early March of 2018. As a result, the critical thinking initiative has served the valuable function of facilitating ongoing collaboration across academic units that might have otherwise struggled to find common ground. We are optimistic that our critical thinking initiative will continue to serve this purpose and, as we discuss below, we are hopeful that the initiative will develop in a way that allows UW-Stevens Point to address some of the challenges that now beset us. There is little question that we are facing a series of necessary choices that impose an additional level of difficulty upon this work, but these same choices

require us to sharpen our institutional focus in a way that could both motivate and benefit from a commitment to critical thinking as a signature pedagogy at UW-Stevens Point.

Intrinsic Challenges

- The Challenge of Terminological Diversity

Although the importance of critical thinking is widely acknowledged across the curriculum and in the workplace, critical thinking can be difficult to define. This breeds suspicion in many quarters that the critical thinking skills cultivated in one discipline bear no relation to the critical thinking skills developed in another, and – more worrisomely – that the critical thinking skills desired by employers bear little resemblance to the critical thinking skills of concern to higher education.

The critical thinking literature, conversations with local employers, and collaboration with instructors from across the curriculum did point to a common, if rough, conception of critical thinking. It also, however, exposed pervasive (and sometimes serious) terminological differences that can easily obscure this deeper, conceptual, consensus. “Belief,” for example, figures in the definition of critical thinking advanced by Peter Facione, according to which critical thinking is “purposeful, reflective judgment which manifests itself in reasoned consideration of evidence, context, methods, standards, and conceptualizations in deciding what to believe or what to do” (Peter Facione, 2015, “Critical Thinking What It Is and Why It Counts,” <http://www.insightassessment.com/Resources/Critical-Thinking-What-It-Is-and-Why-It-Counts>). Although acceptable to most instructors in the humanities (where the term “belief” is used in a normatively neutral way), this definition of critical thinking fit uneasily in the natural sciences, where “belief” is often restricted to mental states that are unjustified by, and resistant to, reason or empirical evidence. After extensive conversation, we have revised Facione’s definition to read, “critical thinking is a process of identifying, analyzing, evaluating, and constructing reasoning in deciding what conclusions to draw or actions to take.”

Disciplinary divergences in terminology have emerged around a multitude of words, including “hypothesis” (which may be used without any etiological presumption in the humanities but which, in the sciences, often carries the assumption of arising from study or observation), “inference” (which can refer to a conclusion that is drawn from the evidence or to a logical connection between claims), “conclusion” (which is also called a “thesis statement” in many subjects), and “missing premise” (which is equivalent to “warrant” for students of Toulmin’s model of argument). We are confident that more terminological differences will surface as we continue our work, and we are convinced that successfully teaching critical thinking across the disciplines requires addressing these variances.

Terminological issues have proven to be so important, in fact, that we submit that the success and maturity of a cross-disciplinary critical thinking initiative at any institution can be profitably gauged by

the extent to which it has identified and responded to terminological differences. This is because such differences emerge as a direct consequence of broad engagement, broad engagement is necessary for any work that crosses disciplinary boundaries, and disciplinary boundaries must be crossed by a critical thinking initiative that aspires to help students hone and apply their critical thinking skills in a wide variety of contexts.

- The Challenge of Untutored Expertise and Elevated Expectations

Although most instructors value critical thinking, embrace it as a learning outcome, and (rightly) consider themselves to possess solid critical thinking skills, few instructors had explicit education in critical thinking as students, and fewer still have had any training in how to teach it. Instead, they possess untutored critical thinking expertise acquired while mastering their discipline. It is hardly a surprise that they feel unprepared to intentionally teach the skills that they have unintentionally mastered.

A consequence of this previously established untutored expertise, we submit, is the tendency to expect too much of novice students and to pitch critical thinking learning outcomes too high. We have witnessed this at the curricular level, noticing that the critical thinking learning outcomes at the foundation of our GEP focus exclusively upon the construction of good arguments, a complex skill that presupposes a facility with argument analysis and evaluation that many students lack.

Also, as noted previously, we are addressing these challenges by providing workshops in critical thinking pedagogy for instructors, and by building ancillary instructional modules to provide students with the essential critical thinking concepts and skills necessary to succeed in their coursework. We anticipate that as conversations about critical thinking continue on campus, many instructors will feel empowered to articulate and teach to more developmentally-appropriate critical thinking learning outcomes.

It should be noted, at least in passing, that we have not encountered two challenges that we fully expected to confront: a skepticism about the need to teach critical thinking skills, and a perception that addressing critical thinking skills in class will take valuable time away from covering essential disciplinary content. In fact, we've found the opposite: instructors are acutely aware that students often fall short in their demonstration of critical thinking skills and they are eager to integrate critical thinking instruction into their courses. It is reasonable, we suspect, to attribute this happy state of affairs to the two challenges that we have recently discussed: untutored expertise and elevated expectations. Students often have a difficult time performing at the levels that instructors expect of them, and instructors often have a difficult time figuring out why. This has been, and will continue to be, fertile ground for an initiative that focuses on critical thinking pedagogy and that helps instructors accomplish more by trying to do less.

Opportunities

The opportunities stemming from our QI are manifold.

From a curricular perspective, we are currently exploring ways to integrate scaffolded critical thinking instruction into our GEP, beginning with work at the Foundation Level and culminating in a capstone experience. We are continuing to meet with local employers to better understand the critical thinking skills required in the workplace, and to ensure that our critical thinking learning outcomes are aligned with community needs. We are beginning to provide professional development opportunities to working adults by presenting to health-care educators and participating in UW-Stevens Point's Leadership Certificate and Workshop Series. Material from our presentation to health-care educators may be found in [Appendix 22](#). Our leadership workshop is currently under development.

As our work continues, we intend to provide a rich menu of critical thinking outreach and continuing education programs to local employers, and to offer a critical thinking certificate both to degree-seeking students (through the completion of designated courses) and to non-degree-seeking students (through the completion of off-campus workshops).

Finally, we are pursuing the formation of a critical thinking center on campus, with a half-time director to coordinate these continued efforts and support critical thinking instruction as a signature pedagogy at UW-Stevens Point's three campuses.

Commitment to and Engagement in the Quality Initiative

6. Describe the individuals and groups involved at stages throughout the initiative and their perceptions of its worth and impact.

Participants

The concept for our QI initiated from a UW System Office of Professional and Instructional Development (OPID) teaching and learning grant that provided stipends to an interdisciplinary team of instructors who met during the summer of 2015 to explore the potential of argument mapping to enhance critical thinking instruction across the curriculum. Participants in the summer work were

- Dona Warren, Professor of Philosophy and (in summer 2015) Assistant Dean College of Letters and Science
- Vera Klekovkina, Associate Professor World Languages and Literatures and (in summer 2015) Co-chair of the institutional Assessment Subcommittee
- Nancy LoPatin-Lummis, Professor of History and (in summer 2015) Director of General Education
- Wade Mahon, Professor of English
- Cade Spaulding, Director of Communication 101

- Jasper St. Bernard, a graduate student in the Division of Communication

The work was exciting and of sufficient promise that it became the focus of our QI, at which time the group of core participants expanded to include

- Todd Huspeni, Associate Vice Chancellor for Teaching, Learning, and Strategic Planning

Naturally, as our work has continued, many individuals have emerged as particularly interested and involved in this project. Among them are the faculty of our pilot courses and the regular participants in our workshops.

Perceptions of Worth and Impact

As noted earlier, we have held over a dozen workshops on critical thinking in conjunction with our QI. They have all be well-attended by instructors from a wide array of disciplines. Our fall 2018 critical thinking pilot currently includes 69 courses taught by 35 instructors from across the university. We interpret this to be among the strongest endorsements of the project that we could hope for.

Survey responses have been similarly encouraging. Some comments from our survey in spring of 2017 include:

- “This has been an awesome professional development experience that has and will continue to inform my teaching.”
- “I would love for this to be incorporated across the curriculum.”
- “I really enjoyed the meetings and I appreciated the personal attention I received from the instructors.”
- “Students struggled at first, but in the end seemed to light up and find pride and dignity in understanding how to argue more clearly. They beamed at being understood and at accomplishing their organization and effectiveness in a smarter and more efficient manner.”
- “This is an incredible project, and I always leave the meetings feeling inspired.”
- “I do think this is an excellent initiative because it relates to a key academic and pedagogical issue (critical thinking) applicable to a great variety of disciplines. I support building this initiative into a campus-wide (perhaps ‘signature’) program.”
- “I'm very impressed with the level of effort you've given to this professional development effort. Thank you!”

7. Describe the most important points learned by those involved in the initiative.

We have learned five important and interrelated lessons from our work so far:

1. A successful initiative designed to intentionally scaffold critical thinking instruction throughout the curriculum requires participation both from disciplinary experts and from specialists in critical thinking instruction. Disciplinary experts are best qualified for the essential task of identifying the specific skills that constitute critical thinking in their respective fields. Specialists in critical thinking are best qualified to situate those skills within a broader framework, to draw distinctions and identify commonalities between fields, and to identify the essential component skills that might be easily overlooked by disciplinary experts.
2. A critical thinking initiative that is deeply interdisciplinary will inevitably expose terminological differences across fields. The construction of shared learning outcomes depends upon resolving these differences as much as possible, as do efforts to help students understand how the skills that they develop in one discipline are complemented or deepened by the skills that they acquire in another.
3. An interdisciplinary critical thinking initiative will expose deep commonalities across disciplines. Regardless of the terminology employed, for example, the humanities, natural sciences, and social science are all concerned with interpretation, the act of understanding an object by subsuming it under a system of related categories, and with the project of justifying some interpretations over others. Uncovering these areas of common pedagogical concern allows us to engage in fruitful discussions, identify learning deficits, and develop rich, interdisciplinary, teaching materials.
4. An unexpected learning deficit that impacts multiple disciplines is the ordering effect on inference identification. Assessment data gathered in our required oral communication course strongly supports what one of us (Dona Warren) has learned in her classroom: students have a pronounced tendency to misidentify the relationship of support when the conclusion is stated before the reasons supporting it.
5. The use of graphical representations of reasoning have the potential to correct for this ordering effect by providing a way to present arguments in a visual form that is divorced from any order of expression. Because graphical representations can help students correctly identify the logical relationships between claims, because correctly identifying the logical relationship between claims is essential to understanding and evaluating a piece of reasoning, and because understanding and evaluating reasoning is central to critical thinking across multiple fields, an interdisciplinary critical thinking initiative is justified in supporting the use of graphical representations of reasoning.

Resource Provision

8. Explain the human, financial, physical and technological resources that supported the initiative.

Our QI was broadly supported by faculty and instructional academic staff, deans, and academic administrators.

Faculty and instructional academic staff enthusiastically participated in the critical thinking workshops and generously shared their time, curiosity, and expertise.

Deans and academic administrators have provided encouragement and financial support. Particularly noteworthy in this respect are

- The Office of Academic Affairs, which provided stipends to the core working group during the summer of 2017, and provided lunch for participants in our workshops during the 2016-2017 and 2017-2018 academic years,
- Provost Greg Summers and Interim Dean of the College of Letters and Science Eric Yonke, who granted Dona Warren a half-time reassignment for the 2017-2018 and 2018-2019 academic years to move this work forward,
- Assessment Coordinator Vera Klekovkina, who is helping to build campus-wide critical thinking assessment rubrics and partnering with Dona Warren in all aspects of the initiative,
- The Associate Vice Chancellor for Teaching, Learning and Strategic Planning, Todd Huspeni, who has constructed and sent out the surveys and taken keen and supportive interest in this work throughout, and
- Barb Grasamkee, University Executive Staff Assistant to the Provost, who has served multiple invaluable functions, including managing workshop logistics and keeping track of the list of registrants.

The University College provided space to hold our workshops, and our Center for Inclusive Teaching and Learning (CITL) provided the equipment to record our spring 2018 workshops and uploaded the resulting footage. Special thanks in this regard are due to Lindsay Bernhagen, Director of CITL, and Sara Olsen, in CITL Media, Outreach, and Operations.

Plans for the Future (or Future Milestones of a Continuing Initiative)

9. Describe plans for ongoing work related to or as a result of the initiative.

We are currently in the process of discussing how intentional instruction in critical thinking can be infused throughout our GEP and our Associate of Arts and Science (AAS) curricula. The shape that this eventually takes will be informed by extensive discussion across our campuses during the 2018-2019 academic year, and determined by the General Education Committee, the Common Council, and the

Office of Academic Affairs. We are confident, however, that the work of our QI will result in a robust program of critical thinking education that will position UW-Stevens Point at the forefront of critical thinking pedagogy nationwide.

We will continue to reach out to employers, technical colleges, and community members to ensure that the critical thinking skills mastered by our students will serve our students well after graduation and align with the needs of our stakeholders.

We intend to create a certificate in critical thinking that can be earned both by degree-seeking students, through the completion of a series of courses designed to address specific critical thinking skills, and by non-degree-seeking students, through non-credit in-person and online workshops.

We plan to create and maintain an online repository of resources devoted to the development of critical thinking skills within and beyond the classroom.

To support this work, we hope to create a permanent critical thinking center with an ongoing half-time director. A draft description of the center and a draft position description for the director are included in [Appendix 27](#).

10. Describe any practices or artifacts from the initiative that other institutions might find meaningful or useful and please indicate if you would be willing to share this information.

Our QI has generated a multitude of resources, including

- Material from numerous presentations, both on and off campus
- A forthcoming Assessment in Practice article for the National Institute for Learning Outcomes Assessment (NILOA) (This is available in [Appendix 28](#).)

We are currently authoring

- Training materials for instructors
- Instructional materials (stand-alone lessons) for students
- Assessment tools

We are eager to share all our material with as wide an audience as possible and intend to build a website to facilitate this. To echo our introduction: Our accomplishments have been significant, and our activities are ongoing. This work will continue long after our QI has ended.