Templates and Rubrics: Connecting Outcomes, Assignments, and Assessment in Interdisciplinary Learning Communities

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At a college where integrative learning is a campus-wide student learning outcome, a template designed for learning community course development also helps students see connections between their assignments, expected learning outcomes, assessment tools, and general education outcomes.

While the need for effective education has always been with us, it seems increasingly urgent in the context of the divisiveness of political, economic, religious, and social claims on individuals. In *Greater Expectations*, the Association of American College and Universities (2002) argues that higher education is a crucial experience for individuals to be able to respond to a world that "is complex, interconnected, and more reliant on knowledge than ever before" (p. 4). The report points out that a specialized education alone is insufficient; college students must become "integrative thinkers who can see connections in seemingly disparate information and draw on a wide range of knowledge to make decisions" (p. 21). Similarly, the National Leadership Council for Liberal Education and America's Promise report, *College Learning for the New Global Century* (Association of American Colleges and Universities, 2007), identifies not just intellectual and practical skills (including inquiry and analysis, critical and creative thinking) but also integrative, contextual learning as essential outcomes for education and employment.

Skagit Valley College, a college located in northwest Washington State, has embraced these concepts since 1986 when the college began offering curricular learning communities. The college has continued to

refine and improve the learning community program through classroom assessment, evaluative research and studies, networking with other colleges and, most recently, participation in the Washington Center's National Project on Assessing Learning in Learning Communities.

Our team walked away from our two-year participation in this project with new friends, new skills, and new tools. Those tools include a protocol for assessing integrative learning, drawing in part from the work of Veronica Boix-Mansilla (2005), and a heuristic for designing integrative and purposeful assignments developed by Lardner and Malnarich (2008). Since the college had been engaged in activities to align general education outcomes, from course outlines to syllabi to outcomes assessment, a logical next step was connecting these two separate but valuable tools. Our goal was to create an uncomplicated yet comprehensive template for developing integrative learning assignments and assessments so that faculty and students could more easily recognize connections between disciplinary and interdisciplinary learning outcomes, assignments, and assessment criteria.

In this paper, we report on our initial efforts to create this framework. We argue that one of the crucial components of an effective learning community lies not just in placing two disciplines side by side, nor even in examining how one illustrates another, but exploring with students complex issues through the lenses of those disciplines. By grounding learning communities within specific disciplines—and most appropriately within the intersection of two or more disciplines—students have the opportunity to interact with others who have different disciplinary groundings and can begin the shift from reflexive responses to more nuanced analysis and purposeful action. It is our hope that by utilizing the template as a means of visually connecting assignments, assessments and outcomes will enhance our students' integrative learning experiences.

Skagit's Learning Communities and General Education

An early adopter of learning communities in Washington State, Skagit Valley College has required learning communities for the transfer degree since 1993. The primary goals of the requirement are to help students develop an understanding of the connections among disciplines and to support students' development in academic writing. To meet these goals and the needs of students, Skagit offers approximately 50 learning communities each year, generally pairs of courses, both developmental and college-level, in a variety of structures—fully collaborative, linked, federated, on-ground, and online.

While the degree of integration varies, the expectation is that all learning communities will emphasize collaborative, interdisciplinary learning and that students will work together to prepare projects, panels, or papers that show their understanding of the connections between two fields of study (Dunlap & Pettitt, 2008).

In addition, the college recently completed a three-year review of its general education program to evaluate relevance and ensure measurability of the college's general education learning outcomes. As a result, Skagit Valley College has identified eleven learning values, each with associated student learning outcomes: application and integration, information literacy, critical thinking, communication, community and cultural diversity, global/local awareness and responsibility, individual awareness and responsibility, aesthetics and creativity, mathematical reasoning, scientific literacy, and technology. Since the adoption of these learning values, faculty have been working to integrate associated outcomes into their course outlines, syllabi, and assessments.

Leveraging Disciplinary Knowledge and Interdisciplinary Understanding

Central to Skagit's learning communities program is an understanding of learning communities as a set of practices that support and deepen learning. These best practices include curricular integration, collaboration, reflection and synthesis, as well as the experience of linking theory with practice and learning in community. To this end, students are given the encouragement and means to engage in strategies that connect diverse voices and viewpoints—their own and others'—for purposes of challenging, reworking, and transforming traditional boundaries of knowledge.

Our view of the complex process of integrative learning, described in Figure 1, embeds integrative learning in the overall context of ambiguity and community, both of which represent the socially mediated and socially constructed nature of interdisciplinary learning. On the one hand, community and community relationships offer the supportive and nourishing network that facilitates the questioning, exploration, and risk taking representative of interdisciplinary modes of inquiry. On the other hand, ambiguity represents the real world of multiple choices and available options, the selection of which implies certain consequences, outcomes, and access to further choices.

Figure 1. *Leveraging Disciplinary and Domain Knowledge*
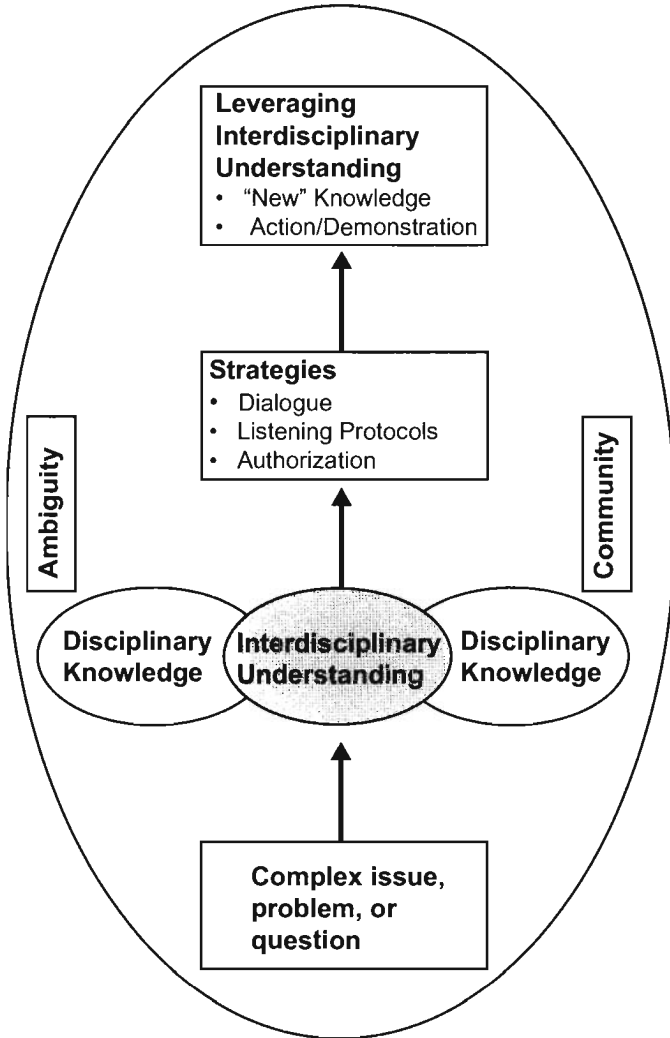
A key element in the process of integrative learning is to begin with a significant question that intersects or bridges two or more disciplinary pools of knowledge—what we refer to as "interdisciplinary understanding" (the shaded area in Figure 1). In elaborating on the significant question that has been posed, we attempt to engage the student in three critical strategies that contribute to the leveraging of disciplinary understanding into a more complex understanding of the world through interdisciplinary-based lenses.

The first strategy—dialogue—places students in different groups to discuss specific aspects of the question at hand and how different perspectives shape perceptions and analyses. This strategy encourages students to think contextually, to deepen their understanding of disciplinary concepts through application, and to recognize interconnections and relationships.

A second strategy—listening protocols—helps learners move beyond accumulated pools of received knowledge toward broader understandings of difference and similarities. Opportunities to interact with others who have different views foster respectful interactions and the creation of a discourse community where learners can begin to shift from reflexive responses to more nuanced analysis. Through listening activity, students identify limitations and silences endemic to various perspectives and appreciate alternative ways of constructing realities and interpreting the world.

A third strategy—authorization—involves students in assessing different viewpoints. By taking the "best" pieces of the perspectives heard in the discourse community and patching them together, learners begin to shape and construct a communal synthesis. New patterns of connections between pools of knowledge are authenticated and, consequently, authorize and cumulatively strengthen a novel mosaic of competencies and perspectives related to the significant question initially posed by the group.

The end point of the application of these strategies is the emergence of a consensual, interdisciplinary knowledge base—a mini-community respectful of its members and confident of its own outcomes and collective viewpoint. The generation of interdisciplinary understanding through this ensemble of methods is not a step-by-step process. Rather, dialogue, listening protocols, and authorization are strategic activities that lead to a socially constructed and socially mediated system of information sharing that requires a more complex means for assessing student learning outcomes. Thus, there is a need for purposely designing assignment and assessment criteria with this synchronicity in mind.

The *Study of Social Problems* Learning Community

An example of a fully collaborative learning community that explicitly attempts to engage student learners in the aforementioned strategies is *An Introduction to the Study of Social Problems*, which combines Sociology 201 (Social Problems) with Psychology 205 (Social Psychology). In a

general way, this learning community attempts to sensitize students to the conditions necessary for maintaining a democratic way of life in the face of structural, technological, and institutional changes taking place in contemporary society. More particularly, *An Introduction to the Study of Social Problems* works to help learners construct an understanding of the roles that violence and inequality plays in United States society. The construction of this understanding is primarily driven by constantly shifting between the individual (psychological) and structural (sociological) levels in order to isolate possible causal factors capable of shedding light on why violence and inequality play the role they do in our society.

The focus of the learning community is on four highly readable paperback works: Sam Chaiton and Terry Swinton's *Lazarus and the Hurricane* (2000), Sonia Nazario's *Enrique's Journey* (2006), Tracy Kidder's *Mountains Beyond Mountains* (2003), and Elizabeth Kolbert's *Field Notes from a Catastrophe* (2006). These texts address issues such as racism and social justice, immigration, disparities in health care and global relationships, and human-produced environmental degradation, respectively. Taking each book in turn, students collectively discuss and research identified issues for each social problem, paying close attention to the source, consequences, implications, and possible solutions to each issue or identified problem at both individual and structural levels. These discussions take place in groups and as a class.

Simultaneously with the reading of each text, students develop skills for defining how one recognizes a social problem, analyzes social problems using scientific methods, and applies different sociological and psychological perspectives to social problems for interpretive purposes. Students are expected to progressively incorporate these skills into each of the writing requirements associated with the text under review. Each paper builds on the one before as students demonstrate increasingly sophisticated thesis statements as well as carefully reasoned, evidence-based conclusions derived from their analyses as they traverse the four major readings of the course.

More specifically, in the first essay focusing on the issues described in *Lazarus and the Hurricane* (Chaiton & Swinton, 2000), students are asked to identify and empirically establish a social problem through the use of a working definition of what constitutes a social problem. In the second essay, focused on *Enrique's Journey* (Nazario, 2006), in addition to establishing a social problem, students are asked to use different sociological and psychological perspectives in their analysis of the social problem. (For example, sociological perspectives might include functionalist, conflict, and interactionist; psychological perspectives might

include behavioral, psychoanalytic, and hierarchical.) In the third essay, after reading *Mountains Beyond Mountains* (Kidder, 2003), students add a third requirement, the use of formal causal models in their analysis. In the remaining essay, on *Field Notes from a Catastrophe* (Kolbert, 2006), students incorporate all the components of social problem analysis with increasing sophistication while addressing the writing requirements of the assignment.

While the writing assignments, primarily essays, are individually produced, they are informed by collective dialogue and insights. Toward the end of the *Study of Social Problems* learning community, students are invited to make their learning significant through some group community project or through sharing their expertise in a campus-wide social science symposium.

As noted previously, each written assignment is preceded by the formulation of a specific question or issue(s) based on the text under consideration. The assignment asks students to craft a response that not only specifies disciplinary outcomes (e.g., the structural or individual impacts of the problem or issues) but also to demonstrate integrative reasoning or an analysis that leverages disciplinary knowledge and interdisciplinary understandings into novel analytical, predictive, or inferential territory. Assessment of these skills is then based on both disciplinary learning outcomes and the integrative outcomes that make up Skagit's general education learning outcomes.

Template for Connecting Outcomes, Assignments, and Assessments

The template we designed for the *Study of Social Problems* learning community (see Table 1) is based on the belief that a guided, intentional process for connecting course outcomes, assignments, and assessments during course development must also be explicitly modeled so students can see the connections between their assignments, expected learning outcomes, assessment tools, and general education outcomes. The template provides a framework for identifying learning outcomes (e.g., knowledge, skills, and abilities) as well as measures for assessing both disciplinary and integrative outcomes, and includes the following elements:

1. The question or issue that drives course outcomes—in the case of the *Study of Social Problems* learning community that question is: "How do multiple disciplinary perspectives broaden and sustain our understanding of a complex social problem?"

2.   A brief summary of the assignment from the syllabus (a more detailed assignment sheet is given to the student).

3.   The first column identifies student learning outcomes. Each instructor in the *Study of Social Problems* has indicated both disciplinary outcomes and interdisciplinary outcomes. The integration outcomes in the last row of the first column are drawn from Skagit's integrative general education outcomes.

4.   The second column indicates the specific knowledge, skills, and abilities that the student is expected to demonstrate in the assignment. In addition, the associated general education outcomes are listed. In the table, the outcomes are identified by a number—the actual language of the general education learning outcomes is included at the bottom of the table.

5.   In the third column, the instructor identifies how knowledge, skills, and abilities will be assessed. This column is an abbreviated version of more elaborate rubrics developed by faculty as part of the general education program at the college. Faculty may use these, modify them, or create their own. A complete rubric for one of the learning outcomes addressed in this course assignment (Learning Outcome 4.2) is presented in Table 2. Table 3 illustrates the complete rubric for assessing interdisciplinary learning based on an assessment rubric for interdisciplinary writing developed by Boix-Mansilla, Duraisingh, Wolfe, and Haynes (2007).

Table 1. *Connecting Outcomes, Assignments, and Assessment in Integrative Experiences, Social Problems Learning Community*

Significant Question/Issue: How do multiple disciplinary perspectives broaden and sustain our understanding of a complex social problem?

Assignment: Using an assigned text on the immigration experience (e.g., Enrique's Journey), write a 5–7 page, well-researched essay that applies and describes how immigration would be treated from at least three major sociological and/or psychological perspectives.

Outcomes	Specific Knowledge, Skills, and Abilities Demonstrated	Assessment Tools – Rubric Criteria
Disciplinary Outcomes – Sociology Identify the structures and institutions involved in or contributing to the existence of the social problem	Identify specific aspects of the family, court and justice system, local government funding mechanisms, etc. that impact or contribute to the social problem (Gen Ed Outcomes 5.2, 9.2)	*Deficient (1)*: Does not demonstrate awareness of specific structures related to a social problem *Developing (2)*: Demonstrates a limited awareness of specific structures *Sufficient (3)*: Analyzes structural characteristics or practices *Proficient (4):* Compares and contrasts structural characteristics or practices of several institutions
	Devise an explanation of how these structures and institutions are involved (Gen Ed Outcomes 2.2, 2.4)	*Deficient (1):* Does not demonstrate contributions or influences of specific structures on a social problem *Developing (2):* Identifies a contribution or influence of a specific structure *Sufficient (3):* Identifies a source of a contribution or influence of a specific structure *Proficient (4):* Identifies the impact of the contribution or influence of a specific structure
	Develop skills to research data that support your view about how they are involved (Gen Ed Outcomes 1.1, 1.2, 1.3, 2.3, 10.3)	*Deficient (1):* Does not identify key words or concepts, appropriate sources, or extent of information needed *Developing (2):* Frames a research question, but does not identify appropriate sources or determine extent of information needed

Table 1 (cont'd)		
Outcomes	**Specific Knowledge, Skills, and Abilities Demonstrated**	**Assessment Tools – Rubric Criteria**
		Sufficient (3): Frames a research question, identifies appropriate and varied sources, and determines a point of view *Proficient (4):* Frames a research question, determines extent of information needed, identifies appropriate and varied sources, determines point of view, integrates information to support the point of view, and cites appropriately
Disciplinary Outcomes – Psychology Identify how the social problem impacts the individual or interacts with the individual's physical, mental, and emotional development	Identify individual definitions of the situation (Gen Ed Outcomes 2.3, 6.4)	*Deficient (1):* Does not demonstrate awareness of individual diversity within the social problem *Developing (2):* Demonstrates a limited awareness of individual diversity *Sufficient (3):* Analyzes the individual's definition of the situation *Proficient (4):* Compares and contrasts individual's definition of the situation with others' definitions
	Identify the processes used by the individual to assess context and implement behaviors appropriate to the context (Gen Ed Outcome 4.2)	*Deficient (1):* Does not demonstrate awareness of the processes used by individuals to assess their situation *Developing (2):* Identifies at least one process by which a person assesses his or her situation *Sufficient (3):* Identifies a variety of processes by which a person assesses his or her situation

Table 1 (cont'd)		
Outcomes	**Specific Knowledge, Skills, and Abilities Demonstrated**	**Assessment Tools – Rubric Criteria**
		Proficient (4): Identifies a variety of processes and connects them to specific behaviors appropriate to the situation
	Determine how the individual tests his or her reality through impression management or image feedback (Gen Ed Outcome 2.4)	*Deficient (1):* Is not able to identify reality testing mechanisms *Developing (2):* Identifies a single mechanism for reality testing *Sufficient (3):* Identifies how individuals use others as social mirrors to adjust behavior *Proficient (4):* Compares and contrasts the efficacy of different impression management techniqes in response to a social problem
Integration Outcomes Identify and evaluate the relationships among different perspectives within a field of study or among different fields of study (0.3) Integrate concepts and analyticial frameworks from multiple perspectives to develop one or more of the following: more comprehensive descriptions, multicausal explanations, new interpretations, or deeper explorations of issues (0.4) Analyze and reflect upon insights gained from integrating multiple perspectives in a purposeful project or experience (0.5)	Sociological functionalist approach integrated with the psychological behavioral approach Sociological conflict approach integrated with the psychological conflict approach (e.g., Freudian psychoanalytic theory) Sociological interactionist approach integrated with Maslow's hierarchical approach	*Naïve (1):* No obvious sense of intergration of sociological and psychological perspectives *Novice (2):* Minor efforts of integration present, but language of integration is used mechanistically *Apprentice (3):* Makes a valid integration of interdisciplinary insights to generate understanding *Master (4):* Integration is elegant, balanced and coherent, and results in novel or unexpected insights

Table 1 (cont'd)		
Outcomes	**Specific Knowledge, Skills, and Abilities Demonstrated**	**Assessment Tools – Rubric Criteria**
Identify and evaluate connections and relationships among disciplines (2.7)		

General Education Outcomes Addressed

Disciplinary Outcomes—Sociology
- Identify diverse communities and their shared/competing interests and develop strategies for prevention and resolution of conflict (5.2)
- Demonstrate their understanding of the principles of scientific methods, analysis, and reasoning (9.2)
- Analyze issues and develop questions within a discipline (2.2)
- Evaluate decisions by analyzing outcomes and the impact of actions (2.4)
- Determine the extent of information needed (1.1)
- Access the needed information effectively, efficiently, ethically, and legally (1.2)
- Evaluate information and its sources critically (1.3)
- Identify, interpret, and evaluate pertinent data and previous experience to reach conclusions (2.3)
- Use technology appropriate to the context and task to effectively retrieve and manage information, solve problems, and facilitate communication (10.3)

Disciplinary Outcomes—Psychology
- Interpret and evaluate pertinent data and previous experience to reach conclusions (2.3)
- Use self-reflection to recognize and define a sense of self-identity in personal, social/gender, and/or cultural/global terms and in relationship to others (6.4)
- Understand, value, and respect human differences and commonalities as they relate to issues of those diverse perspectives (4.2)
- Evaluate decisions by analyzing outcomes and the impact of actions (2.4)

Table 2. *General Education Learning Outcome Rubric for Community and Cultural Diversity Outcome 4.2*

Learning Value Definition: Recognizing the value of human communities and cultures from multiple perspectives through a critical understanding of their similarities and differences

Learning Outcome: Understand, value, and respect human differences and commonalities as they relate to issues of race, social class, gender, sexual orientation, disabilities, and culture

Capability	Deficient (1)	Developing (2)	Sufficient (3)	Proficient (4)
1.Demonstrates awareness of diverse peoples and cultures	Does not demonstrate awareness of diverse peoples or cultures	Demonstrates a limited awareness of peoples and/or cultures other than one's own	Analyzes the characteristics or practices of a culture other than one's own	Compares and contrasts the characteristics or practices of several cultures
2. Identifies the contributions and influences of diverse cultures	Does not identify the contributions and influences of diverse cultures	Identifies a contribution and/or influence of a culture other than one's own	Identifies the source of a contribution and/or influence of a culture other than one's own	Identifies the impact of the contribution and/ or influence of a culture other than one's own
3. Understands the economic, historical, political, or social influences on culture and/ or exerted by culture	Does not demonstrate an understanding of the economic, historical, political, or social influences on culture	Demonstrates slight understanding of the economic, historical, political, or social influences on culture	Demonstrates an understanding of the economic, historical, political, or social influences on culture	Able to draw conclusions that demonstrate an understanding of the economic, historical, political, or social influences on culture
4. Builds knowledge of diverse ideas, values, perspective, and experiences	Acknowledges the existence of multiple points of view, but tends to discount alternatives to one's own perspective	Demonstrates an awareness of different ways of knowing, but little empathy	Demonstrates respect for multiple points of view and can clearly articulate those perspectives	Integrates various points of view into work and demonstrates an appreciation for the value of multiple points of view

Table 3. *Assessment Rubric for Interdisciplinary Learning in an Integrative Experience*

	Naïve (1)	Novice (2)	Apprentice (3)	Master (4)
1. Does the work include selected concepts and methods from two or more disciplinary traditions relevant to the purpose of the work?	The work shows no evidence that *disciplinary* concepts or methods are used to address the work's purpose. Multiple concepts or methods may be considered, but these do not represent *disciplinary* insights or are not clearly related to the work's purpose.	The work includes two or more relevant disciplinary concepts and methods, but the connections between the included disciplinary insights and the purpose of the work are superficial or unclear. Crucial disciplinary concepts and/or methods may be missing.	The work includes concepts or methods from two ore more relevant disciplines or fields. Selected disciplinary insights are clearly connected to the purpose of the work. Disciplinary insights that are tangential to the purpose may be present, or relevant perspectives missed.	The work includes concepts or methods from two or more relevant disciplines or fields. Selected disciplinary insights are clearly connected to the purpose of the work. No unrelated disciplinary insights appear and no crucial perspectives are missing.
2. Is there an integrative device or strategy (e.g., a model, metaphor, or analogy)?	The work may explore a topic in a holistic way, but connections are unclear and there is no obvious sense of integration.	The work may explore a topic in a holistic way, making valid connections across disciplinary or field perspectives; however, insights from different perspectives are not integrated coherently or effectively. In some cases, disciplinary concepts, theories, perspectives, findings, or examples are	An integrative device (e.g., a leading metaphor, a complex causal explanation) clearly brings disciplinary insights together in a generally coherent and effective way.	A novel, imaginative, or well-articulated integrative device (e.g., a leading metaphor, a complex causal explanation) is used to bring disciplinary insights together in a coherent and effective way.

Table 3 (cont'd)				
	Naïve (1)	**Novice (2)**	**Apprentice (3)**	**Master (4)**
		placed side by side; connections and analogies are made, but no overall coherent integration is discernible.		
3. Is there a sense of balance in the overall composition of the work with regard to how the disciplinary perspectives are brought together to advance the purpose of the work?	The work shows an imbalance in the way particular disciplinary perspectives are presented in light of the purpose of the work (e.g., particular disciplinary perspectives are given disproportionate weight for no obvious reason).	The work attempts to balance perspectives, but this is built on artificial or algorithmic grounds rather than substantive ones (e.g., giving equal weight to each disciplinary perspective studied irrespective of its substantive relevance to the problem at hand).	Disciplinary insights in the work are generally balanced on substantive grounds in light of the purpose of the work. However, one or more aspects of the argument may be weakly addressed.	Disciplinary insights are delicately balanced to maximize the effectiveness of the work in light of the purpose of the work. The integration is elegant and coherent.
4. Do the conclusions drawn from the work indicate that understanding has been advanced by the integration of disciplinary views?	The work attempts to make connections across different perspectives, but these are unrelated to the apparent purpose of the work.	Minor efforts at integration are present or a language of integration is present, but is used mechanistically to yield minimal advancement toward the intended purpose.	The work makes a valid integration of disciplinary insights to generate understandings linked to the purpose of the work. However, some obvious opportunities to advance the purpose of the work are overlooked or undeveloped.	The work takes full advantage of the opportunities presented by the integration of disciplinary insights to advance its intended purpose both effectively and efficiently. The integration may result in novel or unexpected insights.

Table 3 (cont'd)				
	Naïve (1)	**Novice (2)**	**Apprentice (3)**	**Master (4)**
5. Does the student exhibit awareness of the limitations and benefits of the contributing disciplines?	There is no awareness of the differing contributing disciplines or fields or their benefits or limitations (e.g., the topic is only approached from a commonsense or very general standpoint).	There is awareness of which disciplines are being used, but there is no or only brief discussion of the limitations and/or benefits of the disciplinary contributions. There may be some misconceptions about how the disciplines are being used.	The benefits or limitations of the differing contributing disciplines or fields are sufficiently and clearly discussed. Some of the points made may be general or obvious.	The benefits and/or limitations of the differing contributing disciplines or fields are discussed clearly, insightfully, and in relationship to one another (e.g., students not only describe individual contributions but highlight how views complement, balance, add empirical grounding, or put into question insights from other disciplines included in the work).

Instructors guide students through the template, emphasizing the connections between their assignment, the expected outcomes, and how the students' work will be assessed. Students can apply the abbreviated assessment criteria in the template (third column in Table 1) when developing draft essays. Instructors could collaboratively assess the students' work using either the abbreviated criteria in the template or more comprehensive rubrics like those illustrated in Table 2 and Table 3. Alternatively, the students could assess one another's work using the abbreviated criteria during in-class, peer-review activities.

Conclusion

In a 1999 monograph, Cross describes the growing evidence that learning is about making connections—neurological, cognitive, social, and experiential—and contends that the connections resulting from curricular learning communities result in a more coherent curriculum and

increased student engagement. Bringing this notion into the development of assignments and assessments in the *Study of Social Problems* learning community has been the focus of the work described in this article. Our goal has been to create an uncomplicated yet comprehensive template for developing integrative learning assignments and assessments—one which allows both faculty and students to see the link between disciplinary and interdisciplinary learning outcomes, the assignments, and the assessment criteria.

These initial results suggest that the model presented in Figure 1 and the increased coherence between outcomes, assignments, and assessment depicted in Table 1 have enhanced interdisciplinary learning in this learning community and may be worthy of further development, refinement, generalization, and wider applicability.

Student work from the *Study of Social Problems* demonstrates identifiable, major differences from their early individual assignments to their final essays. Students can make connections they were unable to even ponder at the beginning of the course; some can leverage disciplinary knowledge to create novel ideas; and most have developed a sharpened and more coherent view of the issue or problem. The final essays and student evaluative summaries also indicate students are testing their understanding of their own experiences and determining how these experiences are related to the new connections they are making. These evidentiary findings are reinforced by the commentary received in evaluations administered at the completion of the course.

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Endnote

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1   Campuses in Mount Vernon, on Whidbey Island, and in several outlying areas enroll approximately 6,500 students (3,800 FTE) each quarter in credit courses leading to a university transfer degree or to a degree or certificate in one of 24 professional-technical programs. The student body is primarily white (80%), and one third are first-generation college attendees. As the region's Hispanic population grows, their participation in higher education is increasing.