Engagement by Design

Implementation and Facilitation Guide

We are now entering our fourth year of Pathways reform at Salt Lake Community College. Because of Pathways work, SLCC has a new application process where we ask students to select one of eight areas of study. And we have embarked on a more intrusive approach to academic advising. We now turn to the work of building the first year and subsequent pathways within areas of study. This implementation guide is designed to assist area of study design teams in that work.

Last year we conducted a college-wide conversation to identify design principles for the implementation of SLCC Pathways. A team of faculty and academic administrators identified eleven principles in the white paper entitled "Engagement by Design: Building the Student Experience in SLCC Pathways." This document will serve as a guide and resource for faculty and administrators as we begin to re-design our programs to implement the eleven engagement by design principles.

Engagement by Design Principles:

1. Faculty and curriculum are essential in helping inform and connect students to an area of study as an early part of their educational experience.

2. Students need to understand the overall organization and goals of a program.

3. Students need effectively designed maps in order to make good choices.

4. A student's first year should prepare her to enter any program within the area of study.

5. The negative effect of students changing an area of study within their first year should be as minimal as possible.

6. General education should be distributed across many disciplines.

7. Curricular and program development should be based on the program, not individual courses.

8. Students learn better when they reflect on their educational experiences.

9. High-impact teaching practices improve student persistence and retention.

10. Students are more likely to persist in inclusive, diverse, and accessible learning environments.

11. Faculty are better teachers when they are supported and passionate about what they do.

SLCC Pathways

SLCC Pathways is a multi-year, college-wide initiative to provide a guided program of study intentionally designed to enhance learning and clarify a student's route to program completion, a career, and further education. A full description of the SLCC pathways initiative can be found at https://i.slcc.edu/plan/pathways.aspx.

While "Guided Pathways" is a nation-wide initiative involving hundreds of colleges, the SLCC implementation of pathways is unique. Pathways at SLCC, titled SLCC Pathways, emphasizes both the structural (course sequencing and strategic use of defaults) as well as what we call program coherence. When we combine these two elements, we make student engagement a function of programmatic design decisions not the product of uncoordinated chance. Designing for engagement is about making sure students experience a transformative education regardless of the choices they make. The work of

ensuring engagement by design has structural implications in terms of sequencing or narrowing course selection but also, and perhaps more importantly, the design must consider the relational and pedagogical practices that are necessary ingredients to student success. Faculty must connect with students early and often to help them make informed choices and to motivate their interest in the curriculum. Areas of study must provide coherent programs of study (and the maps to guide student choice). Finally, engaged faculty must provide high-impact, inclusive educational experiences that call upon students to reflect on their learning.

When institutions collaboratively design an integrated and coherent program model, student learning, engagement, and success increase. Unfortunately, the autonomous and siloed structures of higher education have made program coherence uncommon. Most institutional initiatives are driven at adopting more: another support service, another partnership, another project; all acting in isolation. The result is too many meetings, not enough communication, a fractured student experience, faculty and student burnout and fatigue. Leaders soon recognize that attention is scattered, but connecting the various initiatives appears to be the only way to gather needed resources or to direct the talents of staff with different interests and strengths. As the anticipated gains fail to materialize, there seems little to do but to adopt the next set of initiatives with hope that this one will work.[1]

SLCC Pathways is different. Our strategy shifts the responsibility for student success from isolated individuals to instead designing a collaborative, intentional, and holistic student experience. Our focus is on developing deeper program coherence.

Program coherence uses collaborative design to agree upon a collective approach from which all programs and services flow. As Newmann and colleagues write, program coherence is achieved when the "set of interrelated programs for students, [faculty,] and staff are guided by a common framework for curriculum, instruction, assessment, and learning climate."[2] This guide will lead pathways implementation teams in developing this common framework for each area of study.

The remainder of this guide is set up around key questions and steps design teams will take to implement SLCC Pathways.

What is an Area of Study?

SLCC Pathways is built around the creation of what we call "areas of study." An area of study is an integrated grouping of academic programs collaboratively designed to share a common framework for curriculum, instruction, assessment, and learning climate. But they are more than just a grouping of programs. If that were the case our current structure of academic schools would suffice. Students within an area of study also share a structured, formative experience. This includes recommended course sequences, particularly a common first 15 to 34 credits among degree programs within an area of study, intrusive and case management advising for academic and career planning, and co-curricular opportunities that promote integrated learning across the area of study.

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[1] See Instructional Program Coherence: What It Is and Why It Should Guide School Improvement Policy Author(s): Fred M. Newmann, BetsAnn Smith, Elaine Allensworth and Anthony S. Bryk Source: Educational Evaluation and Policy Analysis, Vol. 23, No. 4 (Winter, 2001), pp. 297-321

[2] Ibid

An area of study aims to create a structured, formative experience for students. By introducing the students to a limited number of areas of study and simplifying the early course options we prepare the student for future complexity. We also design the initial introduction to the area to ensure the student has a highly engaged learning experience that assists them in evaluating and in declaring a major.

SLCC has identified the following eight areas of study for development:

1. Arts, Communication, and Digital Media
2. Business
3. Computer Science & Information Technology
4. Health Sciences
5. Humanities
6. Manufacturing, Construction, and Applied Technologies
7. Science, Engineering, and Math
8. Social and Behavioral Sciences, Education, and Human Services

Collaboratively Designed Area of Study Framework

Each area of study will collaboratively design a guiding framework detailing the area of study's approach to curriculum, instruction, learning climate, and assessment. The framework includes the following elements for both the common first-year sequence and the program-specific coursework:

1. The skills, concepts, and habits of mind attained by each program's graduates aligned with transfer and/or industry partner expectations;

2. Where and how each skill, concept, and habit of mind is first introduced as well as how each will be developed throughout the area of study and program;

3. How related supporting services, high-impact and inclusive teaching practices, co-curricular opportunities, and the case management intrusive advising milestones are integrated into area of study and program design to support and promote the integrated learning of the identified skills, concepts, and habits of mind;

4. How the area of study and programs will cultivate a positive learning climate including specific practices and behaviors that faculty and staff will adopt to support the identified skills, concepts, and habits of mind; and

5. How faculty assess student learning, instructor teaching, and overall learning climate to ensure students are learning and are well prepared for transfer or employment.

Each area of study framework is built by beginning with the end in mind. First, design teams must define the program learning outcomes, based on the skills, concepts, and habits of mind needed for successful transfer (for transfer-oriented programs) or for placement into an occupation with a competitive wage (for career and technical education programs). Faculty also ensure that these skills, concepts, and habits of mind are mapped across the SLCC college-wide learning outcomes.

Notice that nothing above talks about courses. The process is focused on what the students learn not what courses they take. Only after the skills, concepts, and habits of mind are identified and sequenced do we turn to building courses. Faculty then determine which courses (whether new or existing) will

achieve the identified skills, concepts, and habits of mind, accordingly mapping out the learning process students follow on their way to completion.

Once the courses are designed and sequenced, the framework must also address the other elements. It must specify how appropriate student support is integrated into program design (e.g., when do students meet with an advisor, create an ePortfolio, build an academic plan, etc.). The framework must also specify the deliberate use of high-impact and inclusive teaching practices and how these have been integrated across area of study and program design to support the identified skills, concepts, and habits of mind.

Lastly, the framework must describe the assessment plan for the area of study and its related programs. How is assessment conducted throughout the area of study and programs to ensure students are achieving learning milestones and on track to master all learning outcomes? How are faculty using student assessment to continuously improve area of study and program design?

An area of study framework must include each of these five elements to achieve program coherence. Each element and how to go about building the framework are further described below.

What are Skills, Concepts, and Habits of Mind?

The terms skills, concepts, and habits of mind come from a compilation of educational and learning research. They often go under a variety of names, but these are the one used by the authors of *Redesigning America's Community College* and represent a common language we can adopt collectively. The learning approaches that focuses on these elements are often grouped under the name of "inductive teaching" techniques and include: inquiry-based learning, problem-based learning, project-based learning, case-based teaching, and just-in-time teaching.[3] A brief definition of skills, concepts, and habits of mind is provided below.

Skills: includes both program-specific procedure (writing a business plan, creating a website, or setting a patient at ease) and general education skills (considering diverse perspectives). The skill is placed in context: not just how to do it, but why this skill is useful in relation to the student's goals.

Concepts: how a student understands and experiences discipline-specific content. Concepts are how students organize deep, functional understandings of a multifaceted, complex domain. Webster defines concept as "An idea or mental picture of a group or class of objects formed by combining all their aspects." For example:

- Students develop a *concept* of human anatomy not just by compiling knowledge about organs, bones, muscles, and tissues in the body, but they must also integrate them into a total concept of how each of these works together; or
- Students develop their *concept* of human artistic expression by making connections between the basic visual elements of line, color, light, form, composition, and space to specific artistic schools, periods, and techniques.

Each discipline has many different concepts that function as the underlying foundation for knowledge organization. Our job is to help students build out these integrative concepts so that they move beyond simply memorizing facts to building complex mental models that define our disciplines. This happens as

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[3] Perhaps the best exposition of the efficacy of this approach is presented in Maryellen Weimer's *Learner-centered Teaching* and Susan Ambrose's (and colleagues) *How Learning Works*. All SLCC faculty, staff, and administration are encouraged to more deeply engage with these materials. Please contact the faculty development office for free copies.

we design programs to intentionally build mental concepts of the discipline which ask students to make connections across assignments, courses, and their general education distribution courses.

Habits of Mind. This category, particularly with regard to the variation of cultural, economic and class distinctions of current and future new student populations,[4] encompasses two complementary components: 'college going' habits of mind and 'discipline-based' habits of mind.

> *College-going Habits of Mind:* apprehension of the metacognitive processes (e.g., breaking a large, complex learning task into component parts to be accomplished step by step); behavioral habits (e.g., completing at least some school-related work every day); approaches to learning (e.g., reading text for meaning rather than skimming it for specific facts); and mind-sets (e.g., the "growth mind-set" that hard work, rather than innate talent, is key to success), all of which students must adopt to successfully learn and apply key concepts and skills.
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> *Discipline-based Habit of Mind*: As suggested by Regan Gurung, et al, (2009), habits of mind refers to "the intellectual moves and values" of a field—or in the case of pathways, the intellectual moves and values inherent in a grouping of fields like the natural sciences or the humanities. Areas of study should be clear about what intellectual moves, values, and behaviors the programs in that area expect of all students. For example, the social sciences expect students to be strongly conversant with the scientific method, to have developed a sociological imagination, and to be careful observers and critical readers.

In addition, all areas of study should promote the kinds of general habits that will promote student success: deep reflection, responsible and effective study habits, time management skills, and a growth mindset. Reference: Regan Gurung, et al, ed., *Exploring Signature Pedagogies. Approaches to Teaching Disciplinary Habits of Mind*. Stylus, 2009.

Designing a Common Framework for the Area of Study

The area of study design process involves six steps:

> Step 1: Assemble the Team
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> Step 2: Develop the Curriculum (what we teach)

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[4] See Karen A. Becker, Karla M. Krodel, Bethanie H. Tucker *Understanding and Engaging Under-Resourced College Students: A fresh look at the Influence of economic class on teaching and learning in higher education*: Highlands, TX aha Process, Inc. 2009, particularly p 29,"Most students, instructors, and staff know only the hidden rules of their own economic class and perhaps a few rules from another class…Because the hidden rules of the middle class have been normalized as the dominant culture of the United States, these rules govern most institutions…this dynamic occurs in all groups in relation to other groups; it is one of the seedbeds of bias, prejudice, even racism.' Also see Squire, D. D., & Coquemont, K. K. (2019). Expanding Possibilities through Anti-Oppressive Orientation, Transition, and Retention Programming. In J. Ward-Roof & J.M. Mastrogiovanni (Eds.) Building successful foundations: Best practices in orientation, transition, and retention (pp. 66-78). Minneapolis, MN: NODA – Association for Orientation, Transition, and Retention.

Step 3: Adopt Shared Instructional Practices (how we teach)

Step 4: Cultivate a Positive Learning Climate (how students experience our teaching)

Step 5: Plan for Assessment (how we know our teaching is effective)

Step 6: Strategies for Transitioning Students from Area to Programs

These are each thoroughly explored below. Area of study design teams should follow these steps and use the suggested templates and facilitation suggestions.

Step 1: Assemble the Team

The first step is to be sure you have the right people on the area of study design team. The recommended approach is to have a focused core team. The core team is made up of a smaller group which drafts proposals to be vetted by the larger school curriculum committees (or other ad hoc groups as needed). Below is the recommended membership of an area of study design team.

Typical Core Team Members
Team co-leads: Dean/Administrator and faculty

Associate deans

Two faculty from each academic department (or a reasonable faculty representation)

Area of study advisor

Career coach

The core team develops the necessary proposals and brings them back to the school curriculum committees (or other ad hoc groups as needed) for review and approval. Individual circumstance may necessitate adjustments to this membership or process.

In addition to the design team, the process needs to be sure to include pertinent stakeholders. For example, when the team is defining the skills, concepts, and habits of mind essential for program completion, stakeholders from university partners or relevant program advisory committees should be included and effectively consulted.

Step 2: Develop the Curriculum Framework (what we teach)[5]

Now that you have the design team assembled you can begin identifying the skills, concepts, habits of mind to be included in the area of study and related programs. The curriculum design process has six parts:

Step 2a. Begin with the end in mind

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[5] For useful examples and suggestions, see National Research Council. *How People Learn: Brain, Mind, Experience and School: Expanded Edition*. Washington, DC: The National Academies Press, 2000. This book Is available as a free pdf download from https://doi.org/10.17226/9853.

Step 2b. Organize and sequence learning (not courses)

Step 2c. Group skills, concepts, and habits of mind into courses

Step 2d. Integrate general education into area of study design

Step 2e. Integrate student supports

Step 2f. Write a clear, compelling, and motivating program description

Each of these is explained further below.

Step 2a. Begin with the end in mind.

We need to develop a clear list of skills, concepts, and habits of mind we wish to inculcate within graduates. When a student completes the program, what are they *able to do*. This can be a challenging and overwhelming question.

A quick caution. It can be tempting to want to list things that the student will "know" at the end of the program. Our approach seeks us to move from isolated facts to more complex disciplinary concepts. The focus should not be on the set of "facts" the student must "learn" but rather how the student will conceptualize those facts and use them after she completes the program. Focusing on concepts has shown to increase learning and increases the ability of students to retain that knowledge beyond the course. If you repeatedly end up listing facts students should know, consider spending more time mapping those facts into a concept and include that concept in the outcomes.

In his book *Creating Wicked Students* (the faculty development 2019 book of the year), Dr. Paul Hanstedt argues a similar point. He contends that as we design the learning experiences for our students we must establish "higher-order" learning goals which will requires students to act upon the knowledge taught in the course.

> [E]ducation is about more than memorizing content. Yes, content is crucial but as a means to an end rather than as the end itself. We learn stuff—chemical elements, verbs, equations, policies, concepts—for a purpose, so that we can *do* something with them. And that's where [learning] goals come in: What do we want students to be able to *do* with the content we teach them?[6]

At the end of this step you should have a rather exhaustive list of specific skills, concepts, and habits of mind. This list should include the outcomes across all programs within the area of study. Below are some suggested approaches for developing a clear and coherent list.

Foundational Questions: Hanstedt recommends that a design process begin with four questions. We have modified his questions here to fit our context. In considering both the area of study and your specific degree program, take a moment and write out a few responses to the following questions:

1. Why does this area of study / degree program matter to the work done in your field?

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[6] Hanstedt, Paul. *Creating Wicked Students: Designing Courses for a Complex World*. Sterling, VA: Stylus Publishing, LLC, 2018. Pg 12.

2. In what ways can the information in this area of study / degree program be used in other fields?

3. What is unique about the way your field views the world?

4. What is it you like most about your area of study / degree program?

5. In an ideal world, what would students be able to do with the skills, concepts, and habits of mind they attain throughout your area of study and degree program?

Junior Status Assessment: If you are developing an AA/AS program an effective approach can be to identify *the primary* transfer partner (in most cases this will only be one institution). Find the syllabus for the upper-division coursework. Working with the faculty from that institution, develop a list for the pre-requisite skills students are expected to have before taking those classes.

In most cases the primary partner will be the University of Utah. *Design teams should not strive to meet the requirements for every transfer partner*. When we try to create an articulated pathway for every transfer destination it becomes confusing for a student and administratively difficult to manage. In most cases programs can identify the primary transfer institution and work primarily with that institution. Faculty should then encourage other institutions to consider the pathway that is already developed and ask them to align to that pathway. If you are unsure of your programs primary transfer partner, please contact the office of Data Science and Analytics who can identify the transfer patterns for your program graduates.

Occupational Assessment: If you are developing an AAS program, a similar approach is to identify three to five occupations or career tracks per degree program. The ONet database can provide a detailed listing of essential skills by occupation or occupational family. These can be good starting points for discussion. But these should be vetted and reviewed by industry partners who have recently hired graduates from the program. Consider existing job descriptions or job postings and compare with the ONet descriptions to identify the skills, concepts, and habits of mind to be included in the area of study map.

General Education Learning Outcomes: Consider the SLCC general education learning outcomes and the work in progress by the General Education Design Team. Under each outcomes list one to three specific Area of Study skills, concepts, or habits of mind that students will develop throughout the program. Make this specific enough that a student would understand what it means and is clearly assessable.

Existing Syllabus and PCOs: Pull the syllabus from the major courses within the area of study. Have a scribe transcribe the learning outcomes onto a 3x5 index cards (one outcome per card). As a group, organize the cards into general domains. From each domain synthesize one or two outcomes that capture the basic elements from the group's outcomes. This exercise can also provide a visual representation of the concepts (conceptual model of knowledge) that the program is to develop in a student.

For examples and suggestions on writing effective learning goals/outcomes see Hanstedt 24 -34

Step 2b. Organizing and Sequencing Learning (not courses)

The next step is to find the commonalities across all the programs in the area of study and space them according to dependence. We recommend each team engage in the following activity.

1. Pull the PCOs for each program in the Area of Study.
2. Assemble the program learning outcomes into one document.
3. Begin to group like program learning outcomes.
4. [more development here; this is part of determining skills, concepts, habits of mind] design teams trying to piece together 15-34 credit sequence that all programs within an area of study can share…..

You're basically building your area of study learning outcomes

Step 2c. Grouping Skills, Concepts, and Habits of Mind into Courses

Only after the skills, concepts, and habits of mind are identified and sequenced do we turn to building courses. Faculty determine which courses (whether new or existing) will help inculcate which sets of skills, concepts, and habits of mind. By the end you should have mapped out the exact learning process students follow on their way to completion.

Step 2d. Integrating General Education into Area of Study Design

You now have the program and area of study sequenced. The next step is to intentionally design a complementary general education experience. In General Education Essentials, Paul Hanstedt points out that the current "trend in general education" is a shift from purely distributional models toward models that combine distributive features with more integrative components."[7] In other words, design teams should think about how pathways presents areas of study with an opportunity to provide a more integrative general education experience, one that speaks to both the student's entire general education and to how that general education prepares the student for a subsequent program.

Step 2e. Integrated Student Supports

As the area of study and degree programs structure begins to settle, some critical observations are necessary. The team should highlight any critical decision points, branches, loss points, or milestones that students will experience. These should be specifically noted and enumerated. For example, the decision point for transitioning into the specific program of study should happen at some point between 15 and 34 credits. Student should also have an academic plan in MySuccess by a certain point. These elements should be specified in the framework document. After they are identified the team should consider what specific student supports can be devised to ensure students meet these milestones ready and prepared.

Step 2f. Write a clear, compelling, and motivating program description.

While learning outcomes assist us with designing strong areas of study and programs, they are not in and of themselves motivating. Consider adopting language that will engage a new student's interest in the subject matter. How do you talk about your area and programs to non-experts?

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[7] Handstedt, Paul. *General Education Essentials: A Guide for College Faculty*. San Francisco, CA: Jossey-Bass, 2012. P. 15

Step 3: Adopt Shared Instructional Practices (how we teach)

Now that we have what we will teach, we need to work out a common framework for how we will teach it. This is not an overly prescriptive exercise. Rather the goal of this step is to establish an overarching common framework for instruction based around proven high-impact and inclusive teaching practices.

Step 3a. Select or Develop the High Impact Practices.

The American Association of Colleges and Universities identifies eleven high-impact educational practices (HIPs) that have been shown to improve student persistence and completion, particularly among underserved students (Kuh, 2008). In our design, areas of study must make HIPs unavoidable by building them into area of study and program maps and connecting high-impact educational experiences to the overall goals of the program (including the skills, concepts, and habits of mind a student should possess upon completion). For instance, the Business area of study could decide that all students will have a service-learning experience because they want a community service ethic to become a part of the culture of Business at SLCC. Or the Social and Behavioral Sciences might consider folding an undergraduate research requirement into their curriculum, culminating in a capstone research presentation/ePorfolio requirement.

We need not slavishly follow the AAC&U taxonomy of high-impact practices. The more important point is to understand just what it is about these high-impact activities that appear to be so effective with students. George Kuh tells us that high-impact practices

> demand that students devote considerable time and effort to purposeful tasks; most require daily decisions that deepen students' investment in the activity as well as their commitment to their academic program and the college. . . Second, the nature of these high-impact activities puts students in circumstances that essentially demand they interact with faculty and peers about substantive matters, typically over extended periods of time

SLCC has officially identified fourteen high impact practices. In this step the design team must consider which of these fourteen practices effectively compliment and support the identified skills, concepts, and habits of mind. Design teams may also suggest additions to this list as they develop practices that meet the standards of a high-impact practices (for example we have included "publication studies and projects" on this list because we have a publication center which, when used appropriately, has demonstrated the effects of a high impact practices).

The fourteen high impact practices are:

1. First-year courses and experiences
2. Common intellectual experiences
3. Diversity courses & co-curricular projects
4. Service learning
5. Internship/externships and co-operative education
6. ePortfolio
7. Publication studies and projects
8. Learning communities
9. Collaborative Assignment and Projects
10. Inquiry-based research and scenario-based learning
11. Undergraduate research

12. Global /international learning
13. Capstone courses and projects
14. Writing intensive courses

After careful consideration the team should select three to five high-impact practices that will be deliberately integrated into area of study and degree program design. For each selected HIP the team should describe specifically where and how the HIP is deployed and how it will be assessed for learning effectiveness and enhancement.

Step 3b. Inclusive Teaching Practices

Inclusive teaching strategies refer to any number of teaching approaches that address the needs of students with a variety of backgrounds, learning styles, and abilities.

> Even though some of us might wish to conceptualize our classrooms as culturally neutral or might choose to ignore the cultural dimensions, students cannot check their sociocultural identities at the door, nor can they instantly transcend their current level of development… Therefore, it is important that the pedagogical strategies we employ in the classroom reflect an understanding of social identity development so that we can anticipate the tensions that might occur in the classroom and be proactive about them (Ambrose *et. al*., 2010, p. 169-170).

There are currently several higher education initiatives devoted to promoting inclusive teaching practices. For example, The Teaching Center at Washington University in St. Louis (https://teachingcenter.wustl.edu/resources/inclusive-teaching-learning/strategies-for-inclusive-teaching/) recommends the following major strategies:

- Include Diverse Content, Materials and Ideas
- Create an Inclusive Environment
- Encourage a Growth Mindset
- Strive for Equality of Access to Instruction and Assistance
- Gather and Use Feedback to Refine and Improve Your Strategies

The webpage also provides a reference and resource list highlighting practices that address students of color, LGBTQ students, gender, faculty perceptions, implicit bias and research on teaching and learning. SLCC's Equity Minded Practitioner designation, along with other relevant college inclusivity initiatives, etc., should inform the development of inclusive teaching practices within Areas of Study.

Step 4: Cultivate a Positive Learning Climate (How students experience our teaching)

Fear, anxiety, or pain make it impossible to learn. Whereas curiosity, safety, and excitement can enhance and improve learning. We must design the student experience to cultivate a positive learning environment which transforms fear into confidence and anxiety into anticipation. The goal of this step is to first articulate three to five defining characteristics of the learning climate and then to describe specific design decisions clarifying how we will cultivate this climate throughout the area of study and related programs.

Learning climate is the "intellectual, social, emotional, and physical environments in which our students learn." As Susan Ambrose explains, "climate is determined by a constellation of interacting factors that include faculty-student interaction, the tone instructors set, instances of stereotyping or tokenism, the course demographics (for example the relative size of racial and other social groups enrolled in the course), student-student interaction, and the range of perspectives represented in the course content and materials."[8]

Factors that influence classroom climate (The following is borrowed heavily from Ambrose et. al. (2010, p. 173-179) and is lifted directly from the Cornell University Center for Teaching Innovation).

- **Stereotypes** cause alienation and marginalization among those who are the target of unfair generalizations. In fact, just the threat of stereotypes, what Steele & Aronson (1995) tokened "stereotype threat," can impact learning negatively. Students who have experienced stereotypes or expect to be viewed or judged in a certain way may encounter tensions and cognitive disturbances that interfere with learning.

- The **tone** of a class environment is influenced strongly by the instructor. Studies show that students approach faculty who express encouragement more so than faculty who come off as punitive. Tone can be set by instructors through their interactions with students and through other modes of communication including syllabus.

- **Student-student interactions** during and outside of class affect the overall climate. However, the ways in which instructors and those in authority deal with negative interactions has more of an impact on student learning.

- **Faculty-student interactions** also play a role. Students who felt that their instructor was approachable, had concern for minority student issues and treated students as individuals and with respect reported a better course climate (Astin, 1993).

- **Content** includes the course materials, examples and metaphors, case studies and project assignments used to illustrate the ideas being taught. Content that includes a variety of perspectives or is representative of multiple views is more conducive to a positive climate

It is of critical importance that we consider the importance of learning climate on an increasingly complex and diverse student population, whether via classroom instruction, co-curricular engagement, tutoring and support resources, etc. Several recent SLCC initiatives and activities including the Black Male Summit, TRIO-STEM scholarship programs, Diverse Faculty Fellows, seminars and trainings on microaggressions, equity and inclusive teaching practice (e.g., ACUE, Kelly Hogan Faculty Development Seminar, Bruin Voices), along with SLCC faculty-driven initiatives and practices, etc., have sought to raise faculty and staff

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[8] Ambrose, Susan A. *How Learning Works: Seven Research-based Principles for Smart Teaching*. San Francisco, CA: Jossey-Bass, 2010 page 170.

awareness to the preparation, predispositions and cultural factors, implicit and overt, that can pose challenges to many students, faculty and staff as they seek to build learning-positive relationships, and particularly as students endeavor to demonstrate mastery of course and program content. Reflection upon SLCC's institutional imperatives and departmental inclusivity programs should fully inform this important work of visioning and articulating aspirations and principles for successful student learning in Areas and Programs of Study.

To define and design the climate for the area of study, the design team can do the following:

> Step 4a. Identify the defining learning climate characteristics

> Step 4b. Specify specific behaviors that everyone can adopt.

Step 4a. Identify the Defining Learning Climate Characteristics
We must first identify and describe our aspirational learning climate. At the completion of this step, we will have an aspirational statement for learning climate within the area of study. The statement should communicate clearly and passionately to students what they can expect to experience in the programs.

Developing a vision for learning climate is a collective exercise. To do this you can use some of the following exercises:

Ask Students: Convene a group of students (or just talk with the students in your classes) and ask them to describe their best learning experiences. Once they have identified these experiences ask them to list specific behaviors that created the environment. What did the instructor do to make it such a great climate for learning?

Use Course Evaluations: While course evaluations may not be a great source to holistically evaluate a course, they can provide specific references that can spur ideas for improvement. Consider comments and responses from students that lay out specific emotions or behaviors that impacted the way they thought about the course.

Personal Visions: Collective visions only work if they align to the personal visions for the individuals on the team. Have each design team member write their own personal vision for learning climate. Place the personal vision statements onto a white board or shared document where everyone can see them. Have the group review each other's statements to find similarities and items that resonate. Pull key words and concepts from each personal vision. Using the commonalities draft a collective statement for learning climate.

Link the Institutional Values: SLCC has identified seven values which guide the way we work with each other:

1. **Collaboration** We believe we're better when we work together.

2. **Community** We partner with our community in the transformative, public good of educating students.

3. **Inclusivity** We seek to cultivate an environment of respect and empathy, advanced by diverse **cultures** and perspectives.

4. **Integrity** We do the right things for the right reasons.

5. **Innovation** We value fresh thinking and encourage the energy of new ideas and initiatives.

6. **Learning** We learn as a college by building outstanding educational experiences for students and by supporting faculty and staff in their professional development.

7. **Trust** We build trust by working together in good faith and goodwill to fulfill the College's mission

How can the area of study and related programs reinforce the institutional values?

Some examples to stimulate thinking can be found at https://poorvucenter.yale.edu/ClassClimates; https://www.brown.edu/sheridan/teaching-learning-resources/inclusive-teaching/statements

Also, key 'habit prompts' regarding critical success issues (e.g., the importance of the first three weeks of a term, etc.) should be standard in all learning climate statements.

Step 4b. Specify specific behaviors that everyone can adopt

With a clear statement of the learning climate, we now need to decide upon the behaviors that we can collectively adopt to ensure we create that climate. We can do this through creating a do / do not table. The following table is adapted from such a table at the University of Maryland and can provide a good starting point for you team's conversation.

Example do/do not table

IN OUR AREA OF STUDY **WE WILL**	IN OUR AREA OF STUDY **WE WILL NOT**
Integrate student comments into discussion to model good discourse.	Make students spokespeople for ethnic, gender, socioeconomic, or other groups.
Circulate through the room, attentive to group behavior, in order to reinforce positive student-to-student interaction.	Ignore observed antagonism between groups of students.
Show students how to diplomatically critique each other's work and rely on peer critique as a feature of your course.	Disrespect or humiliate any student, particularly in the presence of his or her peers.
Learn and use student names and encourage students to use each other's names in class discussion.	Create an ongoing sense of difference between a student whose exceptional work you share with the larger group and the rest of the class (i.e., be sure emphasis is on the work and not on the individual student, if you single him or her out for praise).
Create assignments in which small groups share distinct responsibilities for a common learned objective.	Grade in a way that merely encourages students to compete with one another.
Provide opportunities for students and groups of students to present their work to the class or to a larger public.	Let students regularly form the same small groups (if possible, put students together whom you think could learn from each other, given expressed interests and previously submitted work).

Be attentive to the varied experiences students bring to your course.	Make assumptions about students' experiences and identities

After you have a draft of specific behaviors, review it to make sure that the behaviors address the elements of a positive learning climate: stereotypes, tone, student-student interaction, faculty-student interaction, and content. Include the will/will not table in the area of study framework.

Step 5: Plan for Assessment (How we know our teaching is effective?)

This step is to plan how learning assessment is conducted throughout the program to ensure students are achieving program learning milestones and are on track to master all the skills, concepts, and habits of mind.

All faculty constantly engage in assessment throughout every class session. The process of teaching requires faculty to gauge her students' comprehension and adjust the content accordingly. The vision of this step is to take that same process and apply it to area of study and program design. We should be constantly gauging student achievement and using it to refine the program to improve learning.

The most commonly understood assessment mechanism is course grades. The problem with course grades is that they provide little to no qualitative information to use in improving course or program design. A qualitative assessment of learning outcomes allows a more precise improvement process. Faculty can begin to pin-point exact topics or approaches that need improvement.

Using the outcomes created in Step 2, the assessment plan will detail the specific tools and practices faculty will use to assess (1) program learning, (2) area of study learning, and (3) course or specific milestone learning. Each will be considered below.

Program Level Learning Outcomes

After a student completes the program, how do we ensure that the degree is awarded based on documented student achievement of the program learning outcomes? How will you know that the student has all the outcomes necessary to be successful in upper division coursework or in the related occupation?

Consider some of the following approaches:

Program ePortfolios: The ePortfolio has been called a "capstone in progress." Since must of the structure of an ePortfolio is also provided through the general education ePortfolio program, programs and areas of study could adopt the same process. At the end of every year faculty could assess the completed ePortfolio for program graduates. This would give a comprehensive look at student learning across their entire learning experience.

Industry Certifications / Comprehensive Final: Many disciplines have industry certifications which directly tie to many of the program outcomes. For programs that don't have an aligned industry certification they could look at developing a similar process but administered internally. These assessments could take many forms not just a long test.

Other ideas such as competency-based education (CBE) assessments, common course and program assessments, etc. should be considered.

Step 6: Strategies for Transitioning Students from Area to Programs
[to be constructed]

Conclusion

We want to remind areas of study that this is a guide. Its purpose is to direct the thinking of design teams, not limit it. SLCC is taking an iterative approach to pathways work. Each year, we introduce new elements with an eye toward assessing impact, making improvements, and continuing to build on the work. In other words, design teams shouldn't feel pressure to somehow "solve" pathways this year. Key deliverables for this academic year include assembling the design teams, building an introduction to the area of study course, and forming initial plans for what an integrated area of study looks like (shared curriculum, teaching, assessment, learning climate, etc.).

The stated purpose of SLCC Pathways is to "provide a guided program of study intentionally designed to enhance learning and clarify a student's route to program completion, a career, and further education." But pathways work is also about us realizing our stated SLCC values of collaboration ("we're better when we work together") and innovation ("we value fresh thinking. . .". We encourage design teams to embrace these values as they build their areas of study.