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Pathways to Results (PTR) is an outcomes-focused, equity-guided process to improve programs and policies that support student transition to and through postsecondary education and employment. PTR focuses on addressing equity gaps between diverse learner groups and continuously improving processes critical to student success, including retention, completion of postsecondary credentials, and transition to employment.

The PTR process is most effective when it begins with a strong collaboration of team members and partners focusing on the critical problems that get in the way of student success in particular programs of study. These problems are identified when the teams use student-level data to identify outcome and equity gaps in results between racial, gender, low-income and other underserved groups and special populations. Major processes are assessed to understand how contributing factors create the identified problems and impede student success. Implementation and evaluation plans are designed to create solutions that improve the

quality of programs of study immediately and over time. PTR gives teams the opportunity to continuously improve programs of study and produce evermore equitable student outcomes. When PTR is implemented fully, the opportunity to improve programs never ends.

An overarching goal and benefit of the PTR process is that it provides teams with the opportunity to continuously improve programs of study and produce ever-more equitable student outcomes.

"During the writing of our Process and Practice Assessment report I came to truly understand the beauty of letting the process guide us to where we need to go instead of us deciding where we need to go regardless of what the data showed."

— Lauri Wiechmann, West Central Illinois Partnership

### Overview

The purpose of this module is to provide an understanding of how processes or practices contribute to student success along a pathway. Doing *Process and Practice Assessment* enables practitioners to use their emerging or deepening knowledge of gaps in student outcomes to solve problems in practice. This is a form of applied systems thinking in which practitioners look at the large, systemic functions of their institution and proceed to strategically drill down to understand how the steps and practices that make up these major functional processes affect students' achievements and the larger system.

Focusing on improving process and practice rather than blaming students for their inadequacies is fundamental to PTR. *Process and Practice Assessment* is a means by which the "deficit thinking" that sometimes characterizes discussions of outcome inequities is overcome. In other words, teams can move from the idea that "if we had better students, we would have better outcomes," to the idea that "if we create better processes, our students will demonstrate better outcomes" (Harmon, Liss, & Umbricht, 2012).

This assessment begins with the identification of major functional processes (e.g., academic support services, academic planning, marketing, recruitment, enrollment, instruction, student support services, career development, and job placement) that support the movement of students along a pathway. These processes are examined to understand how they impact student outcomes and contribute to the problems identified in a PTR project. One or two major processes are identified for further detailed analysis.

The identified processes are then described in detail, including a step-by-step listing of the actions that define the processes, a deeper dive into the intention of and students' participation in various learning and success practices, and evaluation of both from the student perspective. These steps result in a detailed understanding of how students experience the pathway and a list of potential factors that contribute to the problems. Those contributing factors are further analyzed to determine other underlying root causes. Understanding these contributing factors is essential to the team's development of effective solutions.

Once the major processes and practices are detailed, the team should involve those responsible for improving the process or practice in the PTR initiative. These individuals should also be encouraged to contribute improvement ideas and help build support and buy-in for improving support components. This step also emphasizes gathering students' insights to enhance understanding of the issues significant to student success and how they would go about resolving problems. Involving students in organizational change not only better informs program improvement, but also provides students with a chance to engage with meaningful educational issues and apply their own critical thinking and problemsolving skills.

The actual experiences of a PTR team appear in Appendix A.

### What's the Difference between a Process and a Practice?

There are many ways to define the terms "process" and "practice" within the realm of pathways and programs of study. Both concepts are explored in this module because understanding both the major functional processes (the sequences that shape the student experience) and the individual practices that align with and support those processes can reveal impediments to student success.

A major functional process can be defined as a set of interrelated actions within all or most pathways or programs of study that achieve a specific result. A process contains multiple steps that follow a sequence to the intended result, and may integrate one, and often more, supporting practices. A practice is an intervention or support—which may be repeated throughout a pathway—with an identifiable and measureable outcome and an underlying

theory and evidence. Student participation in a practice can be measured in isolation of other practices and processes. However, because practices should be well integrated within a pathway and its processes, it can be difficult to measure the outcome of participation in the practice in isolation of the larger system. Often practices support or align with the goals of one or more major functional process.

Enrollment is an example of a major functional process at every institution. Although the steps of the process may vary, the end result is students selecting and registering for classes to begin their program of study. The process of enrollment consists of each step the student, advisors, and registrars take to register for classes. For example, if an advisor is required to ask the student for their intended major, this is one step. Changing the student's major in the computer system is another step. These two steps are interrelated, follow a direct sequence and aim to assist the student to select the appropriate courses.

In PTR, teams are asked to identify and analyze major functional processes that align with their outcomes gap(s). These are big picture processes from the point of view of students and their movement through the pathway. So, how

learning, and more (for more on practices, see Appendix E).

do student experience enrollment and registration, advising, instruction, academic support, student support, career development, job placement, recruitment, or other processes? As they map their processes, teams seek out a particular step or set of steps (i.e. a subprocess) that does not appear to be effective in supporting the goal of the major functional process

and thus contributes to the existing outcomes gap. Intrusive advising is an example of a practice that supports one or more major functional processes (including enrollment and registration). Although it too may include steps, as a practice, it can be characterized as a distinct intervention with measureable outcomes intended to address student retention, align course selection, and provide early intervention in student performance. Moreover, a process (i.e., enrollment or registration) can achieve a general goal such as student selection and registration for courses with or without intrusive advising as a component. Practices like intrusive advising are sometimes adopted with the idea of addressing student success issues and institutional concerns. Other practices include college success courses, freshman year orientation, learning communities, service

Major Functional Processes	Supporting or Aligned Practices		
	<b>→</b>	Dual Credit	
Matriculation	>	Information Sessions	
or transition	-	Orientation	
into the	>	College Success Course	
institution	>	Developmental Education	
	<b>→</b>	First Year Experience	
Enrollment	<b>→</b>	Testing	
and/or	<b>→</b>	Mentorship	
academic	<b>→</b>	Advisement	
planning	-	Early alerts/intrusive	
		advising	
	<b>→</b>	First Year Experience	
6 1 1	<b>→</b>	Learning communities	
Curricular	<b>→</b>	Service learning	
pathways	<b>→</b>	Undergraduate research	
	<b>→</b>	Work-based learning	

In PTR, teams are asked to review the practices that support their major functional processes and/or have goals aligned with identified outcomes gaps. Teams then have the opportunity to drill down into existing practices to determine if the proper supports are provided along the pathway, as well as to consider how students are participating in these practices and to what effect.

The primary purpose of Process and Practice Assessment is to understand the individual and linked components that support the pathways and program of study. By reviewing current processes and practices, improvements can be identified to enhance student outcomes.

## Purpose and Goals

The goals of this phase are to:

- 1. identify the major functional processes and practices supporting student pathways and programs of study that may impact the student outcomes gaps
- 2. describe steps for the major functional processes and explore subprocesses and the intention of and participation in practices that support these major processes in order to identify aspects that might contribute to the documented problems
- 3. confirm the primary contributing factors that affect the impediments and/or limit improvements in processes and practices.

### Outcomes and Equity

Process and practice assessment is a means by which the "deficit thinking" that sometimes characterizes discussions of outcomes inequities is overcome. In other words, teams can move from the idea that "if we had better students, we would have better outcomes," to the idea that "if we create better processes, our students will demonstrate better outcomes." Understanding student perspectives can inform the identification of problems and solutions and strengthen a team's equity lens.

## Outputs

Outputs of this phase are:

- PTR Process Inventory
- Detailed Process Description Worksheet
- Inventory of Student Support Practices Worksheet
- Contributing Factors Worksheet
- Student Response Analysis Worksheet

### Steps at a Glance

STEP 1: Identify and describe major functional processes that support student progress along the pathway.

This step requires that the team identify major functional processes (e.g., marketing, recruitment, testing and assessment, instruction, student support services, career development, and job placement) that support the movement of students along the pathway.

STEP 2: Describe the detailed process steps, purposes, and practices relevant to the identified processes.

This step provides a thorough exploration of the processes that define the student pathway and helps teams to drill down into specific practices that align with and support student success in these major processes. This step concludes with the team creating a list of potential factors—in subprocesses or practices—that contribute to the student outcomes gaps.

STEP 3: Confirm the potential factors that contribute to student outcomes gaps.

The purpose of Step 3 is to determine underlying reasons for the identified problems. Understanding these contributing factors (or reasons) is essential if the team is to develop effective solutions. This step will include gathering relevant perspectives, with a particular attention to student voices, using either focus groups or another approach, such as a student survey. Step 1:
Major
Functional
Processes
Selection

Step 2:
Detailed Process
Steps and Practice
Review

Step 3: Contributing Factors

## Who Should be Involved?

Some aspects of Process and Practice Assessment tasks need to be done by the full team, but others can be delegated to sub-groups. For example, creating smaller groups or teams may be a good way to flow-chart an existing process or practice, conduct focus groups, or assess student engagement in processes or practices. It is important for teams to remember that people knowledgeable about key practices and processes need to be included in these sub-groups. For example, teams assessing an individual advising practice should have a representative of the advising department present during the process. It is also important to gather students' perspectives to understand the potential factors causing gaps or impediments in processes and practices. Including students, representatives, and other key stakeholders will provide greater insights about key processes and practices and enhance trust in the eventual outcome. Other steps in this phase can be addressed by individual team members, followed by discussion and consensus-forming at the team level.

#### Recommended Materials

The team may benefit by reviewing:

- Team Worksheet and Contribution to the Charter (Appendix I of the Outcomes and Equity phase)
- Existing descriptions (including recruiting and advising materials) of the pathway
- Any existing maps or graphics of the current processes
- Student Focus Group Toolkit, available at: occrl.illinois.edu/files/Projects/ptr/focusgrouptoolkit.pdf

The team needs the following documents:

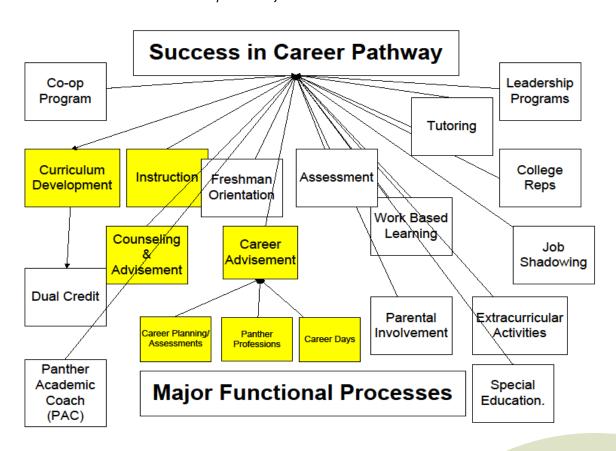
- PTR Process Inventory
- Detailed Process Description Worksheet
- Inventory of Student Support Practices Worksheet
- Contributing Factors Worksheet
- Student Response Analysis Worksheet

## **Detailed Steps**

# Step 1: Identify and describe major functional processes that support student progress along the pathway.

The team identifies major functional processes (e.g., marketing, recruitment, instruction, student support services, career development, and job placement) that support the movement of students along the pathway. Processes that are thought to impact outcome problems identified in the Outcome and Equity phase are examined closely. The sequence of activities that occur within this step are:

A. Engage the team in identifying and inventorying major functional processes with a focus on the point of view of students and their movement from entry point to exit point along a pathway. Use brainstorming or another method to create a comprehensive list. Remember, the purpose of this step is to list major functional processes, not to develop detailed descriptions of each process or make assumptions about their contributions to identified outcome gaps. Detailed descriptions are developed in Step 2. Use the PTR Process Inventory (see Appendix B) to record the list and summarize the team's notes.



Example - Major Functional Processes

- B. Briefly describe each major functional process by answering the following questions:
  - What is this process called?
  - What is the purpose of the process?
  - What is the overall result of the process?
  - How does the process relate to the problems identified in the problem statement?
  - Should the process be examined in greater detail?
- C. Revisit the problem description and consider whether the problem is encompassed in the identified major functional processes. For example, if retention of minority students is a concern, the team needs to be sure that the major processes that most affect minority student retention are included in the inventory of processes developed in this step.

D. Reach consensus on one or two major functional processes that should be examined in greater detail. Teams should select processes that relate directly to the problems identified.

# Step 2: Describe the detailed process steps, purposes, and practices relevant to the identified processes.

This step first provides a thorough exploration of steps within the selected major functional processes that define the pathway and program of study and then helps teams to explore data on how students participate in and benefit from the practices that support student success within these processes. This step concludes with the team creating a list of potential factors that contribute to the student outcomes gaps.

See Appendix C for a Sample Team Meeting Agenda for this step.

A. For each major functional process, list the specific steps that currently exist. Use brainstorming or another method to generate the specific process steps.

One PTR team involved students in this step by asking them, "How did you find out about the program?" The team was surprised to find out that the students had different ideas about how the process worked.

- B. Use the Detailed Process Description Worksheet (see Appendix D) to describe each step. The description should focus on how the process actually functions, not on how the process is intended to function. The team should reach consensus on the following questions:
  - Who does this?
  - What is done?
  - What are the expected outcomes?

In addition, the team should address the following items:

- Data: Describe data collected about the process that could be used to indicate whether the process is accomplishing its intended purpose.
- Issues: Identify issues that exist in the process. Are there aspects of the process that need to be improved?
- Equity: Describe elements of the process that contribute to inequities in student outcomes.
- C. Engage the full team or sub-group in creating a graphic of the process steps, using a Flow Chart, a Cross Functional (Swim Lane) Chart, or other agreed-on format.

For example: One partnership team examined the application process for its Associate Degree Nursing (ADN) program. As the team progressed through process mapping, they realized that the step or subprocess in which students receive advising about missing requirements was not taking place consistently nor was the advice delivered to each student consistent. A flow chart created by this PTR team follows.

#### Example - Flow Chart Student logs into registration website & selects ADN pre-advisement plan No No Student doesn't Student 'Apply" button Apply? eligible not visible apply. Process ends. Student meets with advisor and determines missing requirements. Receive application confirmation Yes Student returns Apply? declination No form or fails to Yes Admit to Student Student receives return for. accepts? program alternate letter Process ends No Yes Process Ends Student returns acceptance form Accept Yes alternate status? Student registers for Yes classes Student returns declination form or fails to return form. Process ends. Student Returns alternate letter completes Student forfeits. program Process ends orientation Program Yes Process Ends Yes Opening? Student recives email

D. Engage the team or a selected sub-team to survey the process flowchart as well as the collected program marketing materials and related process visuals to identify the practices that align with the goals of the major functional process and support student success in the pathway or program of study. In the above flowchart example, two existing practices that would be noted are mentoring and program orientation. The team also identified that it lacked a practice to help students prepare for the written portion of its pre-admission exam.

invitation to participate in

mentoring program

Student fully accepted &

begins ADN coursework

Teams should use the *Inventory of Student Support Practices Worksheet* (Appendix E) to document and drill down into understanding how these practices work to support the major processes and student outcomes. This worksheet provides a summary of two common definitions of a "high-impact practice" as well as criteria for identifying or defining such practices in varying contexts.

After completing the *Inventory of Student Support Practices Worksheet*, discuss and reach consensus on the following questions:

- Are there any practices not included in the pathway that came as a surprise?
  - · Would these practices support achievement related to the identified outcomes gap?
  - Does the team think further research into this practice and perhaps discussion with faculty, staff, or students about introducing this practice would be relevant?
- Of the practices supporting this pathway, are there any that are not mandatory? If so, who participates in these practices? How do they access these practices?
- Of the practices that are mandatory, is the impact on the desired outcome measured?
- Which practices, in particular, seem to line up with the equity or outcomes gap that must be closed?
- Would it be valuable to assess mandatory or non-mandatory practices relevant to the equity or outcomes gap in question to learn more about students' representation in, access to, and impact of these practices?

If so, teams may take a deeper dive into their data utilizing **Appendix E: Assessing Equity in High-Impact Practices Toolkit** of the Association of American Colleges & Universities' Assessing Underserved Students' Engagement in High-Impact Practices.<sup>1</sup> Teams can customize the suggested process for assessing representation, access, and impact to match the student group and the selected practice.

# Step 3: Confirm the potential factors that contribute to student outcomes gaps.

The purpose of Step 3 is to determine underlying reasons for the identified problems. Understanding these contributing factors (or reasons) is essential if the team is to develop effective solutions. This step will include gathering student voices using either a focus group protocol or other method such as a student survey.

The team reviews and discusses the processes mapped and the practices inventoried in Step 2, with a view toward identifying contributing factors to the outcomes gaps. The team will have likely collected additional information about practices and processes, including by consulting with individuals responsible for implementing solutions. See Appendix F for a Sample Team Meeting Agenda for this step.

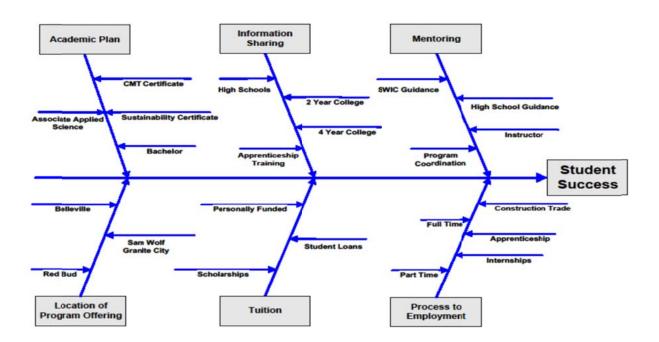
The sequence of activities that accompanies this step follows:

A . The team identifies elements of the processes (e.g. a particular step in the advising process) or practices (e.g. a missing or siloed practice) within their control that contribute to the problems identified. For example, family income may be a contributing factor to student success, but it is outside of the control of the team.

<sup>&</sup>lt;sup>1</sup> Access this toolkit at https://www.aacu.org/sites/default/files/files/assessinghips/AssessingHIPS\_TGGrantReport.pdf.

- B. The team forms one or more hypotheses about why the contributing factors affect the problems identified.
- C. The team then identifies relationships among the contributing factors identified using a Fishbone Diagram, Relationship Diagram, 5W (Five Whys), Cause Map or other tool. The result is a group of potential factors that appear to contribute to the identified problems. This activity is very important, because the identification of solutions needs to be based on a deep understanding of factors that impede student outcomes.

Example – Fishbone Diagram
Factors Influencing Student Success in a Construction Management Technology Program of Study



D. After identifying factors that contribute to the student outcomes problems, the team captures relevant perspectives from various stakeholders to reach consensus on contributing factors. Process and Practice Assessment puts a particular emphasis on gathering the student perspective in order to help expand and/or validate the teams' hypotheses.

Teams may use the *Student Focus Group Toolkit* (See Appendix G for a link to the toolkit) to help design and plan their focus group. The team may learn more about their own assumptions about root causes during these focus groups. For example, a team analyzing a program with low enrollment may expect that a lack of awareness is the root problem. Systematically gathering student voices can confirm or offer alternatives to this root cause.

After conducting focus groups, the team highlights major findings by sorting student responses into reoccurring themes or categories. Use Appendix G: Student Response Analysis Worksheet to analyze and record the findings.

- E. The team uses the process, practice, and student data to reach consensus on the contributing factors that are directly or indirectly affecting the problems identified. They should record answers to the following questions:
  - Does this factor contribute to the outcomes and equity issues identified in the problem statement?
  - Does this factor directly or indirectly affect the problems identified?
- F. The team may need to conduct additional research to identify contributing factors. Team members should address assumptions about the relationship between the problem and its contributing factors. For example, a team analyzing a program with low enrollment may assume a lack of awareness is contributing to the problem, but the team should conduct research to confirm whether lack of awareness is a contributing factor or not. Research may reveal students know about the program but lack interest or are unable to schedule classes, etc.

To conduct additional research, the team may wish to consult the literature, review program evaluations and program reviews, conduct student focus groups, or use other methods. Results of this research should be used to revise and expand on the team's discussion.

- F. The team should reach consensus on the following questions:
  - What are the most important problems within current processes and practices?
  - What elements of these processes and practices affect the student outcomes and equity?
  - Why do the problems exist in the processes and practices?
  - What are contributing factors influencing the processes and practices?
  - Which contributing factors will the team address in the next phase?

## Reflection Questions

- 1. In what ways did the process mapping exercise confirm or challenge previously held assumptions about the selected process(es)? In what ways did the survey of practices exercise confirm or challenge assumptions, or create new possibilities for exploration?
- 2. How did engaging student voices change or strengthen your assessment process?
- 3. PTR engages teams in the analysis of process deficiencies, not student deficiencies. What was most valuable aspect of *Process and Practice Assessment?*

### References & Resources

### Developmental and Transformative Evaluation

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### **Process Mapping**

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- Tague, N. R. (2004). *The quality toolbox.* (2nd ed.). Milwaukee, WI: ASQ Quality Press. More information about the book available online: http://asq.org/quality-press/display-item/index. html?item=H1224
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### **High Impact Practices**

- Center for Community College Student Engagement. (2013). A Matter of Degrees: Promising Practices for Community College Student Success. Austin, TX. Available online: http://www.ccsse.org/docs/Matter\_of\_Degrees\_2.pdf
- McNair, T., & Finley, A. (2013). Assessing Underserved Students' Engagement in High-Impact Practices. Washington, DC: Association of American Colleges and Universities. Retrieved from: https://www.aacu.org/sites/default/files/files/assessinghips/AssessingHIPS\_TGGrantReport.pdf.

## **Root Cause Analysis**

- Sheets, R., Lufkin, M., Stevens, D., Klein, S., & Bhandari, R. (2003). *Improving performance on Perkins III core indicators: Summary of research on causes and improvement strategies*. Columbus, OH: National Dissemination Center for Career and Technical Education. Retrieved from http://136.165.122.102/UserFiles/File/pubs/Improving\_Performance\_of\_Perkins\_III. pdf
- Think Reliability. (n.d.). *Root cause analysis basics*. Retrieved from http://www.thinkreliability. com/Root-Cause-Analysis-CM-Basics.aspx

# Appendix A Team Experience with Process and Practice Assessment

The facilitated meeting for this phase covered process mapping, completion of the *Inventory* of Student Support Practices, as well as discussion of the contributing factors to the team's identified problem. The Illinois College (IC) Partnership team set aside two and a half hours for their meeting.

The IC team created a list of organizational processes that could be contributing to the problem they found. They discussed marketing and recruitment, enrollment, testing and assessment, instruction, academic support services, student support services, career development, placement, and professional development as possible contributing factors.

IC's equity and outcomes data suggested that although many students from both nontraditional (i.e. returning students) and traditional (i.e. straight from high school) backgrounds express interest in the Associate's Degree in Nursing (ADN), a disproportionate number of traditional-aged students were successfully enrolling in the program. As the team progressed through process mapping (see the flowchart on Page 9) and focused in on the enrollment and early advisement process, they realized that the subprocess in which students receive advising about requirements for acceptance into the program was not taking place consistently nor was the advice delivered to each student consistent. The team speculated that for students arriving at IC directly from a high school career pathway, this advising had been supplemented by earlier contacts with program advisors and high school advisors well versed in the ADN program, which resulted in better outcomes for traditional-aged students.

The team then reviewed their academic planning materials and their set of process flow charts for several major functional processes (including enrollment and early advisement, testing and assessment, and instruction) in order to complete the *Inventory of Student Support Practices*. The team identified two high-impact practices—program orientation and mentoring—already in effect in the pathway that were intended to support student retention. Retention was another problem area in IC's equity and outcomes data, particularly for African–American students. Their review of these practices suggested that the mentoring program may be underutilized, particularly by students of color. Moreover, those familiar with the practice suggested that the ADN orientation program might not be having the desired impact on student retention outcomes and could use further assessment to improve outcomes. The team noted that they were lacking any high-impact practice in support of preparing students for the written portion of the pre-admission exam.

The team resolved to follow up with relevant stakeholders, including students through a number of focus groups, to collect additional data and perspectives on these four potential contributing factors in process and practice.

# Appendix B Major Functional Process Inventory

	Major Process 1	Major Process 2	Major Process 3
Name: What do you call this process (e.g., assessment, transfer, graduation)?			
Purpose/ Description: What is the purpose of the process?			
<b>Discussion:</b> How does this process relate to the equity and outcomes gaps identified in the problem statement?			
<b>Decision:</b> Does the team believe this process should be examined in greater detail?			
Use additional workshe	eets for additional proce	esses	

# Appendix C Sample Team Meeting Agenda 1

8:30 – 8:40 Introduction and overview of agenda

Explain the goals of the meeting

Review the agenda

Orient participants to worksheets, tools and other resources

8:40 – 9:30 Identify major functional processes that support student pathways

Engage participants in creating a list of major processes that support student progress along a pathway. Use brainstorming or another method to generate this inventory.

The team revisits problem description, ensures that all major functional processes that affect student outcomes are listed, and discusses whether identified outcome gaps are encompassed within listed processes

9:30 – 10:30 Create a process description

Team briefly creates a formal description of processes. For each process the team considers 1) Name, 2) Purpose, and 3) Overall results 4) How does the problem and practice relate to outcome gap 5) Should the process be examined in greater detail?

The team agrees and selects one or two processes that are related to identified problem and should be examined in greater detail

10:30 - 10:45 Break

10:45 – 12:15 List steps in selected processes. The team lists specific steps for major process. Use Brainstorming or another method to generate specific list of steps.

The team describes each step in detail. Use *Detailed Process Description Worksheet* to describe each step. The team considers: 1) data that indicates if expected results are being met 2) issues or aspects that can be improved 3) equity outcomes

Team or sub-team creates graphic demonstrating process steps. Use a Flow Chart or other instrument. Team singles out steps or subprocesses that may be impeding student success

Survey the process Flow Chart to identify the practices intended to support student success. Use *Inventory of Student Support Practices Worksheet* (Appendix E) to identify the practices that support student success in the pathway. After completing the inventory, reach consensus on the questions outlined at the end of the worksheet regarding missing, siloed, or promising practices.

12:15 – 12:30 Debrief and plan next steps for the team

What process steps and/or practices seem related to the outcomes gaps?

What worked, what didn't?

What comes next?

Will the team look to students for insight on the possible contributing factors before the next meeting?

If so, select a subgroup to develop a plan and carry out these focus groups or a student survey. Prepare the results using the Student Response Analysis Worksheet before the next meeting.

# Appendix D Detailed Process Description Worksheet

Important – Include team notes on data for the process, issues with the process, and the contribution of the process to outcomes and equity. Refer to Step 2B for additional information.

Process Name						
Step	Who does this?	What is done?	What are the expected outcomes? How is this step linked to subsequent steps?			
1						
2						
3						
4						
5						

# Appendix E Inventory of Student Support Practices Worksheet

PTR Teams should review their process flowchart, as well as related academic planning visuals, to identify the key practices—sometimes called high-impact practices—that support student success in the pathway. Teams should begin by reviewing the two definitions and sets of principles provided below that frame the purpose of a high-impact practice. This may help teams think of additional practices in their student pathway that represent the spirit or purpose of a high-impact practice, even if they are not listed on the inventory table on the following page.

### Association of American Colleges & Universities

AAC&U defines their list of ten high-impact practices (HIPs) as techniques and designs that have proven to be beneficial for student engagement and successful learning among students from many backgrounds. These practices can enhance student learning and narrow gaps in achievement across student populations. Research shows that while both all students who participate in HIPs show improvements, Black students' and Hispanic students' gains on certain measures are greater than those of White students. This finding, referred to as a "compensatory effect," suggests that HIPs, while good for all students, might be particularly beneficial for underserved students.<sup>1</sup>

### AAC&U's Principles of Excellence for High Impact Practice

Performance expectations set at appropriately high levels; significant investment of time and effort by students; interactions with faculty and peers about substantive matters; experiences with diversity; frequent, timely, and constructive feedback; periodic, structured opportunities to reflect and integrate learning; opportunities to discover relevance of learning through real-world applications; opportunities for public demonstration of competence.

### Community College Survey on Student Engagement

CCSSE defines a high-impact practice as a practice or pedagogy that demonstrates a notable statistical difference among students who participated in the practice when compared to those who did not. Notable differences were measured for a number a different benchmarks. CCSEE used these findings to produce a list of thirteen practices and a set of principles for effective practice.<sup>2</sup>

#### CCSSE's Design Principles for Effective Practice

Helps students to get a **strong start**; creates clear, **coherent pathways**; **integrates student support** with coursework; sets **high expectations** and high support; **accelerates student progress**; encourages **learning in context**; promotes **student engagement**; **designed for scale**; provides for staff/faculty **professional development**.

Do some or all of these principles resonate with what you look for as you design practices to improve student success on your campus?

Based on these descriptions and principles, what key practices come to mind that relate to the student pathway that you're working on? Or one you have in mind?

<sup>&</sup>lt;sup>1</sup> Adapted from McNair, T., & Finley, A. (2013). Assessing Underserved Students' Engagement in High-Impact Practices. Washington, DC: Association of American Colleges and Universities. Available online: https://www.aacu.org/sites/default/files/files/assessinghips/AssessingHIPS\_TGGrantReport.pdf

<sup>&</sup>lt;sup>2</sup> Adapted from Center for Community College Student Engagement. (2013). A Matter of Degrees: Promising Practices for Community College Student Success. Austin, TX. Available online: http://www.ccsse.org/docs/Matter\_of\_Degrees\_2.pdf

# Identifying Support Practices Inventory Table

High-Impact Practices	Exists? Yes or No	Is the practice mandatory? For whom? If not, who participates?	Who is responsible for the practice?	What are the intended outcomes of the practice?	Do these outcomes align with the equity & outcomes gaps?
First-Year Experience or Seminar					
Learning Communities					
Orientation					
Accelerated Developmental Education					
Early Alert and Intervention					
Supported Student Academic Goal Setting and Planning					
Tutoring					
Supplemental Instruction					
Themed or linked core courses					
Diversity/Global Learning Experiences					
Service or Community-Based Learning					
Writing-Intensive Courses					
Internships					

### Identifying Support Practices Inventory Table, continued

		T .	1		
High-Impact Practices	Exists? Yes or No	Is the practice mandatory? For whom? If not, who participates?	Who is responsible for the practice?	What are the intended outcomes of the practice?	Do these outcomes align with the equity & outcomes gaps?
Undergraduate Research (beyond individual assignments)					
Collaborative Assignments and Projects					
Assessment and Placement					
Dual Credit/ Enrollment					
	tha	Other: Include addi	tional practices or sul rt the major processe		
1:					
2:					
3:					

# **Reflection Questions**

- Are there any practices not included in the pathway that came as a surprise?
  - · Would these practices support achievement related to the identified outcomes gap?
  - Does the team think further research into this practice and perhaps discussion with faculty, staff, or students about introducing this practice would be relevant?
- Of the practices supporting this pathway, are there any that are not mandatory? If so, who participates in these practices? How do they access these practices?
- Of the practices that are mandatory, is the impact on the desired outcome measured?
   How?
- Which practices, in particular, seem to line up with the equity or outcomes gap that must be closed?
- Would it be valuable to assess mandatory or non-mandatory practices relevant to the equity or outcomes gap in question to learn more about students' representation in, access to, and impact of these practices?

If so, teams may take a deeper dive into their data utilizing Appendix A of the Assessing Equity in High-Impact Practices Toolkit of the Association of American Colleges & Universities' Assessing Underserved Students' Engagement in High-Impact Practices (see references for link). Teams can customize the suggested process for assessing representation, access, and impact to match the student group and the selected practice.

# Appendix F Sample Team Meeting Agenda 2

8:30 – 8:40 Introduction and overview of agenda

Explain the goals of the meeting Review the agenda

Orient participants to worksheets, tools and other resources Explain other meeting logistics

8:40 - 9:30 Identify potential factors that contribute to the outcomes gap(s)

Review and discuss the list of process and practice issues from the prior meeting

Brainstorm other reasons (contributing factors) for the problems

Develop an Affinity Diagram of the contributing factors

9:30 – 10:45 Identify underlying root causes

Team discussion of the connections between contributing factors, by mapping out relationships. Use Fishbone diagram, Relationship Diagram, Cause Map or other tool.

If students were consulted via focus group or survey, team discussion of the Appendix G: *Student Response Analysis Worksheet*.

The team reaches a consensus on weaknesses or elements that are working well in major practices or processes.

10:45 - 11:00 Break

11:00 – 12:15 Course of Action

Team decides which of the underlying reasons it will attempt to address For each of the factors, the team will discuss:

Equity: Does this factor contribute to the equity issue(s) identified?

Primary Factor: Is this factor an underlying contributor to the process problem, or is it a symptom of another underlying contributing factor?

Control and Ownership: Can this factor be easily controlled and modified? Do you have sufficient opportunities, resources, and support (stakeholder and owner) to impact the improvement opportunity?

Theory and Evidence: Is there a theory or rationale for the contributing factor? Is there evidence that this is a major cause of the problem? Is there evidence to suggest that it is a major factor affecting results?

12:15 – 12:30 Debrief and plan next steps for the team

- What worked, what didn't?
- What comes next?

# Appendix G Student Response Analysis Worksheet

After completing a series of focus groups (or a student survey), teams should use their results, collective notes, or transcribed data to summarize the findings. This can be done by breaking down the responses into categories related to emerging themes (e.g. the value of peer advising, the lack of clarity in program expectations). This worksheet is intended to help teams organize their data and complete a summary that can be used as teams settle on identified problems in process and practice that are supported by process mapping, practice inventory, and student experiences.

For assistance constructing and managing a focus group, see the Focus Group Toolkit at: occrl.illinois.edu/files/Projects/ptr/focusgrouptoolkit.pdf

As teams compile student perspectives, particularly from a focus group, take the following into consideration:

### **Recording Themes**

Capture themes that arise from the focus group regarding the practices and processes about which your team is most concerned. Take note of unexpected themes or student experiences that might negate or add detail to the team's existing theories. The moderator and a supporting note taker/observer should capture the themes during the focus group and write a summary immediately after.

### Recording Verbatim Responses

With participant consent, creating an audio recording using a digital recording device can be an ideal way to capture quotes and verbatim responses for later reference. Recordings may be used to verify and supplement notes from the focus group and extract useful quotations. If resources allow, recordings may also be used to create written transcripts, which can be used for a more thorough review process. However, creating transcripts can be costly and time-consuming, so if your budget is limited, this might not be feasible.

### Noting Insightful Suggestions

Sometimes participants will offer comments in the form of constructive criticism, particularly astute analysis or observation, or a recommendation about how a practice or process can be improved. Be sure to record these comments and analyze them for alignment with potential root causes.

Use the grid on the next page to help separate student responses into major themes and highlight findings that relate to or modify the contributing factors or problems in practice identified by the team thus far.

### Focus Group Details

How many focus groups did you conduct and how long was each group? How many students were in each focus group?

Did you have a particular target population? What was the final composition of the groups?

# Focus Group or Survey Notes & Themes Table

Questions	Record key comments from respondents	What themes emerged?	Notes re identity of respondents (e.g. program, race, gender, part-time, etc.)	How do these responses confirm or modify your list of contributing factors to the problem?  Did any potential solutions emerge?
1				
2				
3				
4				
5				



# Notes





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