Evaluation and Measurement for TAACCCT Grant Programs: Recommendations and Resources for Getting Started

Final

January 14, 2013

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MATHEMATICA
Policy Research

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BACKGROUND AND OVERVIEW OF THE GUIDE

In September 2011, the U.S. Department of Labor (DOL), Employment and Training Administration (ETA) announced the Round One grants under the Trade Adjustment Assistance Community College and Career Training (TAACCCT) program. Under this program, DOL plans to award $500 million in grants each year from 2011 through 2014. TAACCCT grants provide support for building individuals' skills for employment in high-wage, high-growth fields such as health care, advanced manufacturing, science, technology, and engineering. Grants were awarded to innovative institutional initiatives around the country to increase the attainment of degrees, certificates, and other industry-recognized credentials that provide these skills in two years or less and target economically dislocated and low-skilled workers.

The Bill & Melinda Gates Foundation (BMGF) Postsecondary Success strategy shares the TAACCCT program's goal of increasing attainment of postsecondary credentials that prepare people, especially those from low-income populations, for living-wage jobs. BMGF funded a team from Mathematica Policy Research and the Community College Research Center (CCRC) to provide technical assistance (TA) for measurement and evaluation to 32 Round One TAACCCT grantees. The TA support was designed to increase the grantees' capacity to measure and evaluate their programs and to generate valid evidence about program effectiveness. The Mathematica-CCRC team provided TA through webinars, a convening, and direct assistance to the grantees between May and October 2012. The TA helped identify common measurement and evaluation challenges across Round One grantees, and enabled us to develop recommendations and resources to help current and future TAACCCT grantees structure and implement sound measurement and evaluation procedures to understand and improve their programs.

CONSIDERATIONS AS YOU READ THIS GUIDE:

- These recommendations and resources target current and aspiring TAACCCT grantees. They may also be useful for a broader audience seeking to learn from similar workforce development and postsecondary education programming.
- All TAACCCT grantees must track performance measures for program improvement, including ETA-defined outcomes for both a participant and comparison cohort. In addition, after Round One, grantees must conduct an evaluation. We have attempted to provide recommendations and resources useful to all rounds of TAACCCT grantees.
- Our recommendations and resources do not benefit from direct DOL input and are not sanctioned by DOL. Grantees and grant applicants should communicate directly with their DOL federal project officer to ensure compliance with grant requirements.

This guide provides four key recommendations to help grantees as they plan and implement measurement and evaluation strategies:

1. **Identify and prioritize your learning goals**
2. **Involve key stakeholders early and often**
3. **Develop a shared logic model**
4. **Develop data collection and analysis plans to address your priority learning goals**

For each recommendation, we frame the issue, describe what needs to be done to implement the recommendation, and provide descriptions of, and links to, resources to support grantee efforts. Examples from Round One grantees show how the issues have played out in the field. We conclude with a brief listing of extant resources grantees may find useful.

RECOMMENDATION #1: IDENTIFY AND PRIORITIZE YOUR LEARNING GOALS

Measurement and evaluation can serve many purposes, including:

- **Complying with grant reporting requirements.** You need to know "what happened" in the program and report it per ETA requirements.
- **Understanding program development.** You want to understand how and what happened in the program, and you want to use the findings to improve it.
- **Assessing program impacts.** You want to know if your program caused the observed outcomes, and you want to rule out alternative explanations.
- **Understanding program replication and scale.** You want to learn from the program to expand it to other populations or sites.

To comply with grant requirements and still get what you want from the evaluation, you will need to determine where and how to focus your efforts.

> The **Colorado Online Energy Training Consortium (COETC)** is a statewide consortium that is redesigning developmental education and offering online and hybrid energy-related degree and certificate programs tailored to industry needs. The project manager and the third-party evaluator expressed clear ideas about their learning priorities during the first year of the grant. Although they were aware of grant requirements to report on a narrow set of educational and employment outcomes, they wanted to answer a broader set of questions. The project manager wanted to know not only if the program benefited students, but also if, how, and why the program should continue after TAACCCT funding ended.
>
> The consortium's third-party evaluator asked questions that focused on implementation: What are the roles of organizational partners? What are the experiences of students, staff, and faculty? Do programs operate differently in different college settings? Such questions could shed light on what works, how it works, and how it could be improved.
>
> COETC continues to refine its research questions and devise data collection and analysis plans to answer them. Even as it focused on reporting DOL outcomes toward the end of the fiscal year, it laid the foundation for an implementation study to answer the "how" and "why" questions that would help in making decisions about the program's future.

What Needs to Happen

Determine how your work aligns with, and builds on, evidence of success for the strategy you are using to develop your program. The TAACCCT application requires applicants to describe the evidence that supports the program strategy they adopted and to classify the evidence as "strong," "moderate," or "preliminary." The strength of the evidence can help grantees identify and prioritize what type of measurement and evaluation would best support their learning goals. For example, if evidence of a strategy's effectiveness is weak, you may want to focus on a rigorous impact study to understand the impact of the strategy adopted. If evidence of effectiveness is strong, you might want to better understand successes and challenges in implementing the program so you can replicate and expand it.

Articulate clear, relevant, and answerable research questions that will provide information that can lead to actions to improve the program. When developing research questions that will guide your measurement and evaluation, think about what you would *do* differently if you knew the answer. Also consider the timing of necessary programmatic decisions, and try to structure questions so that evidence of success will be delivered by the time decisions must be made. Developing a logic model (see Recommendation #3) can help.

Understand and leverage TAACCCT reporting requirements to meet learning goals. The TAACCCT reporting requirements generally align with most of the purposes of evaluation listed above. For example, ETA-required quarterly program implementation and progress reports should inform program improvement and can shed light on replication and scale. Similarly, the required annual outcome reports for participant and comparison cohorts can form the basis for assessing program impacts. Challenges arise when TAACCCT reporting requirements do not align with, or even conflict with, grantee learning goals. In such instances, grantees should work with their DOL regional federal project officer to seek appropriate solutions.

Resources to Inform the Work

When working with Round One grantees, we developed materials to help them understand the value of developing and implementing a measurement and evaluation system that can help program heads assess what aspects of their programs are working well and what aspects might need to be enhanced or altered. The materials are in Appendix A and can be accessed using the hyperlinks below:

- **Engaging Practitioners in a Culture of Inquiry: "Evaluation" Work in Context.** A PowerPoint presentation that shows how stakeholders can work with data to enhance learning from college programs and to support continuous improvement.
- **General Principles for Creating Comparison Groups.** A PowerPoint presentation discussing the importance of comparison groups for program evaluation and their limitations: validity of comparisons, possible threats to validity, and how to mitigate these threats to ensure compelling results.
- **Performance Reporting.** A handout developed from the PowerPoint presentation on creating comparison cohorts for evaluation and performance reporting requirements.

The **Air Washington** consortium is launching new programs in the aerospace industry with redesigned developmental education, enhanced support services, and curricula realigned to employer needs. Air Washington initially planned to contract with a research team at a local university to conduct a comprehensive program evaluation, but had to scale back its plans due to budget constraints. It decided that its first priority was to collect and report on the data DOL requires (which includes implementation, progress, and outcome performance measures).

Because the consortium spanned 11 colleges with programs of varying length and credentials in five occupational fields, meeting DOL requirements was a challenge. In particular, DOL's requirement that participant and comparison cohorts be balanced on gender posed problems, given Air Washington's explicit goal of increasing female enrollments and reducing time to completion. The involvement of two of the consortium's colleges in another TAACCCT grant added an extra layer of complexity. Although the grant leadership was keen to learn about how implementation and outcomes varied across programs and colleges, it took a pragmatic approach to evaluation in the first year. It chose to limit the scope of its learning goals to focus on the DOL-required measures and to limit its sample to students at the "lead college" in each of the five occupational fields. Although it may add new learning goals as the grant period progresses, it was able to make the evaluation task manageable by limiting the focus in the first year of the grant.

RECOMMENDATION #2: INVOLVE KEY STAKEHOLDERS EARLY AND OFTEN

Grantees often think of evaluation as separate from program development and implementation and may be tempted to put off developing evaluation-related activities as they deal with the more pressing needs of launching new programs. If measurement and evaluation are not considered early in program implementation, however, it may be difficult to design and implement data collection that can help build strong programs in a continuous improvement framework.

Even if TAACCCT grantees contract with an external third-party evaluator, stakeholders from both the "program side" and "evaluation side" need to communicate early in program implementation. Evaluators must understand the program to evaluate it appropriately, and program leaders need to understand how an evaluation can address their learning goals.

What Needs to Happen

Build measurement and evaluation into program development. During planning and early implementation, stakeholders should have input into what to measure and how to measure it so that data collection and analysis are used in ongoing program development and decision making. If measurement and evaluation are built into program development, stakeholders can provide input and use findings, even if they do not participate in all aspects of program development. Therefore, it is important that you devote enough resources to processes that allow stakeholders to provide input. Round One TAACCCT grantees faced at least two challenges in this area. First, it was difficult to determine when to involve stakeholders—too early, and the program model was unclear; too late, and evaluation design options were limited. Second, because stakeholders had competing responsibilities, it was difficult to ensure that TAACCCT work would receive adequate priority.

Identify and engage the people with appropriate knowledge, skills, and authority for the roles they will play. Different stakeholders have different skills and perspectives, all of which are necessary for successful measurement and evaluation. Key stakeholders will typically play the following roles:

The **North Carolina Advanced Manufacturing Alliance (NCAMA)** is a consortium of 10 community colleges offering accelerated developmental education, ongoing academic and career guidance, and stackable credentials in four manufacturing career fields. NCAMA began engaging evaluation stakeholders early in the grant, contracting with a third-party evaluator even before hiring a permanent project manager. The evaluator, a sociology professor at a local university, was involved in the project throughout the first year of the grant. Working together, the evaluator and the program staff identified evaluation priorities—to validate their theory of action and provide continuous feedback for program improvement—and defined the role of the evaluator accordingly.

During the first year of the grant, the NCAMA project manager refined the evaluation priorities, focusing on job placement and other employment outcomes. The project manager and evaluator began considering ways to improve the rigor of the impact study, such as using propensity score matching to identify the strongest comparison group. NCAMA prioritized both the formative and summative evaluations: the evaluator continued to work with program staff to design the implementation study and sought assistance from TA providers and others to help improve the rigor of the impact evaluation. Engaging an evaluator early allowed program staff to have considerable control over the design of the evaluation, but it has been equally important to maintain strong communication throughout so that all stakeholders can work together toward their common goals.

- **Programmatic leaders.** People leading the design and delivery of program content are the best source for information on how programs are supposed to work for the students they target. Their content expertise should guide early thinking about program logic (see Recommendation #3) and learning goals. They will also use information generated by measurement and evaluation to improve their programs.

The **National STEM Consortium (NSC)** is redesigning developmental education and developing a core curriculum to offer one-year certificates in five STEM fields. As a consortium spanning nine states, the NSC faced significant measurement and evaluation coordination challenges. NSC leadership recognized early that a single measurement and evaluation point person would be insufficient. Therefore, it contracted with a third-party evaluator to design the impact and implementation studies, create survey instruments, and analyze the outcome data. Meanwhile, the dean of IR at the lead college took charge of creating a data dictionary to catalog data requirements for the participating colleges and ensure consistency across the consortium. Finally, to cover the employment data needs, the consortium reached out to a research institute at a local university with experience in collecting cross-state employment data.

The roles and responsibilities of each stakeholder were defined clearly, yet they worked collaboratively to ensure that all evaluation goals would be met. For example, the IR dean and the evaluator together created the data dictionary to ensure all the necessary data elements for the evaluation would be included and the data elements were defined in ways that would be aligned with colleges' internal systems. The result of this collaboration was a clear and comprehensive data dictionary that will foster smooth and timely data collection throughout the grant. Engagement and coordination among multiple evaluation stakeholders will be essential to the NSC's ability to collect and report on many of student outcomes from a diverse group of colleges and states.

- **Institutional research (IR) officers.** College IR officers can help identify data in the colleges' information systems that might be used to monitor and assess program quality. Sometimes, they can generate ideas about integrating data into a measurement and evaluation system, lead efforts to collect new student data (for example, flags for TAA eligibility or program participation), and conduct analyses of student data.

- **Internal or external evaluation partners.** Experts in qualitative methods (for example, interviews, focus groups) can help develop and implement tools that build an understanding of program implementation and inform program improvement. Experts in quantitative methods (for example, statistical expertise) can help determine how to assess program outcomes, including those that DOL requires. Grantees must understand which kinds of expertise they need to meet their learning goals (see Recommendation #4).

- **State workforce agencies (SWAs).** SWAs can provide aggregate reports of student employment outcomes for the group of students identified by the colleges (that is, participant and comparison cohorts) using student Social Security Numbers (SSNs). In some cases, they can also provide individual-level data. Because TAACCCT grantees must report on employment outcomes, most will need to involve their SWA to obtain this information.

Resources to Inform the Work

When working with Round One grantees, we developed materials to help key stakeholders with measurement and evaluation for program quality improvement. These materials are in Appendix B and can be accessed using the hyperlinks below:

- **Choosing and Working with an Evaluator.** A PowerPoint presentation given via webinar by Mathematica and CCRC. Topics covered include "Writing an Effective RFP," "Negotiating with Your Evaluator," and "Creating an Effective Partnership," and each provides an evaluator and a grantee perspective.
- **Summary Notes from "Choosing and Working with an Evaluator."** Transcript-like notes of the webinar provide a detailed discussion of the topic.
- **Measurement and Evaluation Planning Worksheets.** Worksheets designed to help grantees (1) think about issues that can support successful measurement and evaluation efforts as they build their programs, and (2) organize and prioritize measurement and evaluation needs and shape a plan for addressing them.
- **Using Wage Records for TAACCCT Reporting and Evaluation.** A PowerPoint presentation to help grantees understand approaches to reporting employment outcomes. It discusses the basic TAACCCT reporting requirements and additional measures grantees can use to determine the impact of a TAACCCT-funded intervention.

RECOMMENDATION #3: DEVELOP A SHARED LOGIC MODEL

A well-developed logic model lays the groundwork for measurement and evaluation by graphically demonstrating the expected causal relationships—indicating "If we do X, then Y will happen". It identifies what ought to be measured, when it should be measured (that is, at what point as the program unfolds), and how measurement and evaluation can be used for continuous program improvement (prompting questions such as "Did X really cause Y? Why or why not?"). Because many TAACCCT grants involve more than one program at multiple campuses, colleges, or states, a logic model is essential as it allows the disparate stakeholders to have a common understanding of the program. Most important, it identifies the relationships among inputs, activities, and results. Although it is important to develop a shared logic model early, logic models—like the programs—are not static and should be revisited throughout grant implementation.

What Needs to Happen

Agree on program goals and objectives. Program goals must be clearly articulated because they are the benchmark against which progress and outcomes are assessed. DOL's overarching goal for the TAACCCT program is clear: to prepare program participants for employment in high-wage, high-skill occupations. Because different stakeholders may set other goals—for participants or institutions—it is important to articulate, and agree on, which goals are most important and can be achieved within the grant period so they can be included in measurement and evaluation efforts.

Identify key program components. The complexity of most TAACCCT-funded programs can make individual program components difficult to evaluate. Grantees should determine what components are critical to their program success and implementation plans, for these are the elements that should be central in measurement and evaluation efforts. If components vary by program or college, this should be recognized and documented to support understanding of the differences observed between them.

Identify indicators to lay the foundation for measurement and evaluation. TAACCCT requires that grantees measure implementation, progress, and outcomes, and a logic model can help develop indicators for each. After stakeholders have identified the key program components and how they should affect desired outcomes, they can begin to determine which inputs, activities, and results should be tracked and how. Specific measurement approaches may require expertise from IR and evaluation specialists (see Recommendation #4), but the logic model will serve as their point of departure.

The **Missouri Healthcare Workforce Innovation Networks (MoHealthWINs)** is a statewide consortium that is developing short certificate modules and degree programs with online and hybrid courses in four health services career pathways. During the initial stages of implementation, it became clear that there was a disconnect between the original grant writers and the grant implementers: although the relationship among grant priorities, programs, strategies, and outcomes was clear to the executive director and members of the grant-writing team, it was not clear to program staff at the college level.

The leadership team initiated a logic modeling process called "Do the Crosswalk," which allowed program staff at each campus to map out links between grant strategies, program components, and outcomes. Because program staff were overwhelmed with implementation issues during the first grant year, the MoHealthWINs-led researchers provided in-person small-group training sessions and webinars to guide the process. They also rolled out the logic model in small steps, starting in the first year, by identifying which strategies were relevant to each college's program. Colleges are continuing to flesh out the logic model in the second grant year as they link specific actions to each strategy and identify the outcomes most relevant to their programs.

The process has helped program staff focus on what they are doing and hope to accomplish, and ultimately will help the consortium learn how program components affect student outcomes.

Discuss, document, and disseminate how you expect the program to work. Logic modeling needs time and attention. Facilitated workshops can be a good way to explain the program and to produce a documented description of the logic behind it. Other means, such as conference calls, virtual meetings, or wikis, can also serve this purpose, if stakeholders actively engage in the process and the resulting logic is documented, shared, and reexamined as the program, grant implementation, and evaluation activities evolve.

Resources to Inform the Work

Mathematica and CCRC hosted a webinar on "Creating and Applying Logic Models in Your TAACCCT Evaluation." Materials from the webinar appear in Appendix C and are linked below:

- **Creating and Applying Logic Models in Your TAACCCT Evaluation.** PowerPoint from the webinar that explains a logic model and discusses how grantees can develop a model specific to their program to serve as a foundation for measurement and evaluation.
- **Summary Notes from "Creating and Applying Logic Models in Your TAACCCT Evaluation."** Transcript-like notes of the webinar provide a detailed discussion of the topic.

RECOMMENDATION #4: DEVELOP DATA COLLECTION AND ANALYSIS PLANS TO ADDRESS YOUR PRIORITY LEARNING GOALS

A program's logic model will suggest what needs to be measured and when it should be measured. However, grantees still must determine how to (1) define key indicators, (2) collect the data to measure them, and (3) analyze the data in ways that address learning goals.

What Needs to Happen

Develop technical materials to support high-quality, consistent data collection. Data on student characteristics and outcomes will typically be available through colleges' student information systems and SWAs, but a data dictionary—which provides detailed definitions of all terms and specifies how to calculate all measures—is necessary to ensure that all programs or colleges collect and report data consistently. Grantees may need to collect implementation and progress data through other means, including document reviews, interviews, and surveys. Protocols specifying procedures (for example, timing, content, other rules) for such data collection are necessary to ensure that data are consistent and relevant. IR and evaluation partners should have the expertise to develop such materials.

Identify appropriate participant and comparison cohorts. DOL requires grantees to report outcomes for participant and "comparison" cohorts. A comparison cohort is a group of people similar to those enrolled in the TAACCCT-funded program (that is, participants), but who do not receive the services funded by the grant. Individuals in the participant cohort are sometimes known in measurement and evaluation jargon as the treatment group. Reporting outcomes for both participant and comparison cohorts was extremely challenging for Round One grantees for at least three reasons. First, the programs tended to be complex and comprehensive, making it difficult to discern who is in a program and a participant and who is not. Specific issues they needed to consider included how to handle noncredit students, previously enrolled students, programs with few students, and comprehensive programs in which all students are touched by a program. Second, even when it was clear who is in a program, many community colleges could not tract their participation. Some grantees needed to adapt intake mechanisms to flag students as participants or comparison group members and develop a way to link this information to student information systems. Finally, some grantees found it necessary to obtain student consent and information such as SSNs for students that had enrolled in a program some years earlier.

Align analytic methods with learning goals. The method selected for analyzing data depends on how the data will be used and grantees should seek evaluation partners with an expertise in the methodological requirements needed to address *their* learning goal. If a grantee's primary measurement goal is to describe a program's progress and outcomes, the comprehensiveness and quality of data are paramount and the analytic approach is fairly straightforward. If a grantee's primary measurement goal is to understand what program components *caused* better outcomes, the analytic approach must systematically rule out alternative explanations (for example, "The program didn't cause the employment boost; economic conditions did"). Ruling out alternative explanations poses technical challenges and requires careful planning. Experimental methods—in which program participants are randomly assigned to a treatment or control group—provide the strongest evidence of what causes an outcome. It may be difficult to randomly assign students into complex TAACCCT programs, however, and even if it could be done, findings might not be generalizable if the program is small or serves a targeted population or setting. Research that uses random assignment into a program or statistical tools that approximate random assignment (for example, regression discontinuity designs and propensity score matching) have technical challenges and call for specific analytic expertise.

Resources to Inform the Work

Mathematica and CCRC developed several resources to help grantees collect data that meet their measurement and evaluation needs and the DOL reporting requirements. These resources are in Appendix D and can be accessed using the hyperlinks below:

- **Common Performance Measures.** Tables of information to help define and measure implementation, progress, and outcomes for each TAACCCT priority. The handout suggests how to collect data and calculate measures and discusses challenges associated with each.
- **Qualitative Research Guide.** A handout on designing a qualitative study. The worksheet helps grantees refine research questions and determine whether research design can benefit from a qualitative component. Included are tips and suggestions for conducting focus groups and one-on-one interviews.
- **Surveys of Students, Graduates, and Employers.** A PowerPoint presentation reviewing techniques to conduct surveys and providing examples from surveys conducted by Mathematica. It discusses survey design (who to ask, how long it should be), and implementation (who needs to approve), including how to determine the best respondent and appropriate survey modes.
- **Constructing Credible Comparison and Treatment Groups.** A PowerPoint presentation that defines well-designed experimental groups and discusses challenges associated with constructing credible comparison and treatment groups. It also discusses statistical techniques, such as propensity score matching methods, that might be used to ensure similarity between comparison and treatment groups.
- **Dealing with Variation in Treatment.** A PowerPoint presentation that discusses how to define a comparison group when treatment varies across sites or programs of study. It includes real-world examples of successful comparison groups used to assess varying programs and reviews how to incorporate implementation data into your analysis to understand which variations are most important to success.

ADDITIONAL RESOURCES

TAACCCT grantees might find the following resources useful when starting to build and implement their measurement and evaluation systems.

Organizations to Support Measurement and Evaluation

The following organizations contributed to the BMGF-funded TA to Round One TAACCCT grantees.

Mathematica Policy Research. Mathematica is a private research and evaluation firm. The website provides information about the services provided, including program evaluation and policy research, survey design and data collection, research assessment and interpretation, and program performance and data management. It also provides links to Mathematica's research centers, including the Center for Improving Research Evidence (http://www.mathematica-mpr.com/cire/), which provides training and assistance in designing, conducting, assessing, and using research and evaluations.

http://mathematica-mpr.com/

Community College Research Center. CCRC conducts applied research to support the development of practice and policy that will achieve the most effective outcomes for community college students and institutions. Its website provides links to research on the major issues affecting community colleges in the United States, including workforce development, developmental education, and data-driven reform.

http://ccrc.tc.columbia.edu/Home.asp

TAConnecT. TAConnecT provides TAACCCT grantees with "just-in-time" resources and serves as an online community for grantees and vetted experts who can help with grant planning, implementation, and evaluation.

http://www.taconnect.org/

RP Group. RP Group works with California community colleges to strengthen their ability to gather, analyze, and act on information in order to strengthen student success. The site provides links to studies, tools, how-to guides, and multimedia presentations on issues key to success in community colleges.

http://www.rpgroup.org/

Office of Community College Research and Leadership. OCCRL conducts research on policies, programs, and practices, focusing on P-20 preparation, transition, and completion. The site includes links to OCCRL research, including practice-oriented publications on topics of interest to TAACCCT grantees.

http://occrl.illinois.edu/

DOL Resources

TAACCCT Grantee Community of Practice Resources. This site directs Round One and Round Two grantees to ETA resources for implementation and evaluation. Resources include recorded webinars, reporting guidance, and implementation tools.

https://etagrantees.workforce3one.org/ws/etagrantees/pages/resources.aspx?pparams=1001209351762270098

DOL Website for TAACCCT Grantees. This site includes applicant, award, and contact information for Round One and Round Two grantees.

http://www.doleta.gov/taaccct/

Round One Annual Performance Reporting (APR) Training Module. This 87-minute slide show and audiorecording provides guidance on how to complete APR Tables 1 and 2 for Round One grantees.

https://www.workforce3one.org/view/3001209451326249264

Round One Supplemental Materials for APR Training Module. This document includes templates for APR Tables 1 and 2, as well as diagrams explaining how to calculate the required measures in the tables.

https://etagrantees.workforce3one.org/view/2001210248014905650/info

Round One Reporting Schedule. This is a schedule of the quarterly and annual reporting deadlines for Round One grantees.

https://etagrantees.workforce3one.org/view/2001222134012519937/info

Round One Participant and Comparison Cohort Training Module. This 47-minute slide show and audiorecording provides guidance on participant and comparison cohorts.

https://www.workforce3one.org/view/3001132653170738022

Round One Reporting Forms and Instructions. This file includes instructions and templates for Round One grantee annual and quarterly performance reporting.

https://etagrantees.workforce3one.org/view/2001210159266566882/info

Comparison Cohort Match-up Tool. This tool facilitates networking among grantees for comparison cohort matching.

https://etagrantees.workforce3one.org/view/4011210249094479175

Project Inventory for Cohort Development. This checklist of steps helps guide grantees through the process of cohort development.

https://etagrantees.workforce3one.org/view/2001210249299899796/info

Round Two Performance Reporting Training Module. This 30-minute slide show and audiorecording provides guidance on quarterly reporting for Round Two grantees.

https://etagrantees.workforce3one.org/view/4011233245037887198/info

Round Two Reporting Instructions. This file includes instructions for Round Two grantee annual and quarterly performance reporting.

https://etagrantees.workforce3one.org/view/2001233244759335516/info

TAACCCTitioners Monthly Newsletters. These newsletters include grant updates, upcoming deadlines, and grantee stories.

https://etagrantees.workforce3one.org/page/resources/1001210154074757215

APPENDIX A

IDENTIFY AND PRIORITIZE YOUR LEARNING GOALS: RESOURCES

APPENDIX A.I

ENGAGING PRACTITIONERS IN A CULTURE OF INQUIRY: "EVALUATION" WORK IN CONTEXT

This appendix section presents the PowerPoint slides from a presentation given at a TAACCCT Evaluation & Measurement Convening on August 7 and 8, 2012. The presentation kicked off the convening and was designed to show how data can be used to enhance the learning outcomes of programs. The convening was sponsored by BMGF and hosted by Mathematica and CCRC.

Return to Previous Section

Engaging Practitioners in a Culture of Inquiry: "Evaluation" work in Context

A RESOURCE FOR INSTITUTIONAL CHANGE

A Culture of Inquiry

What is a Culture of Inquiry?

Institutional **capacity** for supporting open, honest and collaborative **dialog** focused on **strengthening** the institution and the **outcomes** of its students.

Culture of Inquiry: Features

- Widespread sharing and easy access to user-friendly information on student outcomes
- Encouraging more people to ask a wider collection of questions and use their evidence and conclusions to enhance decision making
- Shared, reflective and dynamic discussions

Culture of Inquiry: More Features

- Multiple opportunities to discuss information within and across constituency groups
- Continuous feedback so adjustments can be made along the way and processes can be adapted
- Culture that values curiosity, questions and robust conversations

Culture of Inquiry: Why All the Fuss?

- Because this ongoing work is challenging but necessary!
- Work needs to marry insight & evidence
- Problems are large and recurring
- No silver bullet / evident answers
- Multiple solutions likely needed
- Progress is not linear
- Requires cross constituency interaction

A RESOURCE FOR INSTITUTIONAL CHANGE

Applied Inquiry Framework for Student Completion

Developed for Completion by Design

Cycle of Evidence-Based Improvement

Stage 1 – **Explore how to improve outcomes**

Stage 2 – **Gather meaningful evidence**

Stage 3 – **Discuss evidence broadly**

Stage 4 – **Use evidence to inform change**

Stage 5 – **Measure the impact of change**

STAGE 1

Explore how to improve student outcomes

Focus inquiry on designing approaches that improve student outcomes.

Key Questions

- What types of questions do we spend most of our organizational resources answering?
- When was the last time you sat in a standing committee meeting on your campus that used evidence to explore a key student success outcome for more than 20 minutes?

STAGE 2

Gather meaningful evidence

Collect high-quality, meaningful evidence at the student support, classroom, program, and institutional levels.

Completion by Design Framing Model

Some Known Loss Points

CONNECTION

- Students never apply to college
- Students delay entry into college
- College counseling patterns that lead to:
  - under enrollment
  - little program-specific guidance
  - missed financial aid opportunities

ENTRY

- Unstructured programs / too many choices
- Extended onramps delay entry to programs of study
- Students fail to enroll/pass Gatekeeper courses
- Poor academic preparation

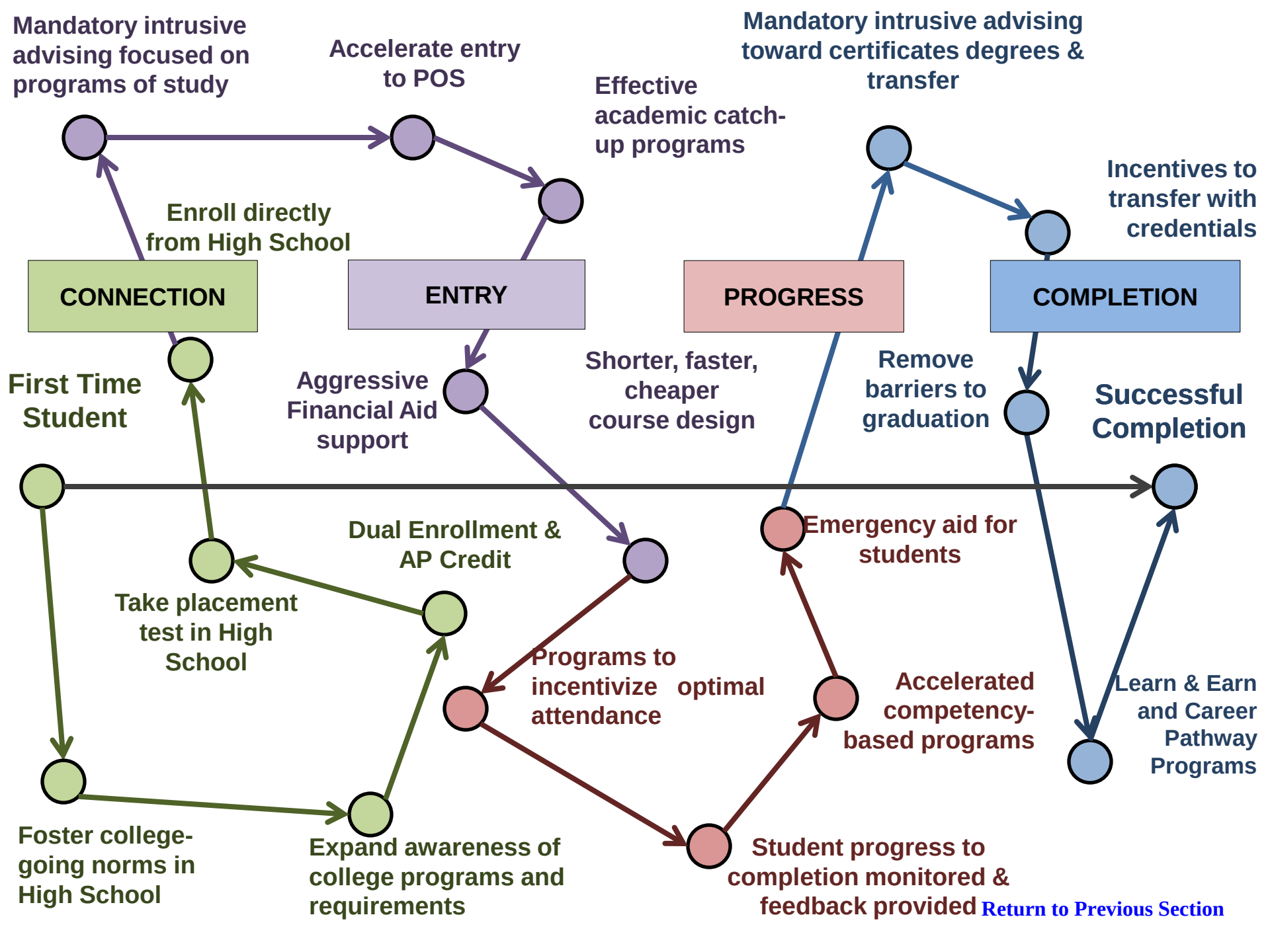
PROGRESS

- Poor work-school balance
- Part-time enrollment forcing long completion times
- Progress not monitored / feedback given
- Life events / “Stop out or drop out”

COMPLETION

- Transfer without credential
- Students accumulate credits (& debt) not aligned with completion
- Never complete college level math
- Credential doesn’t support needed wage & aren’t stackable

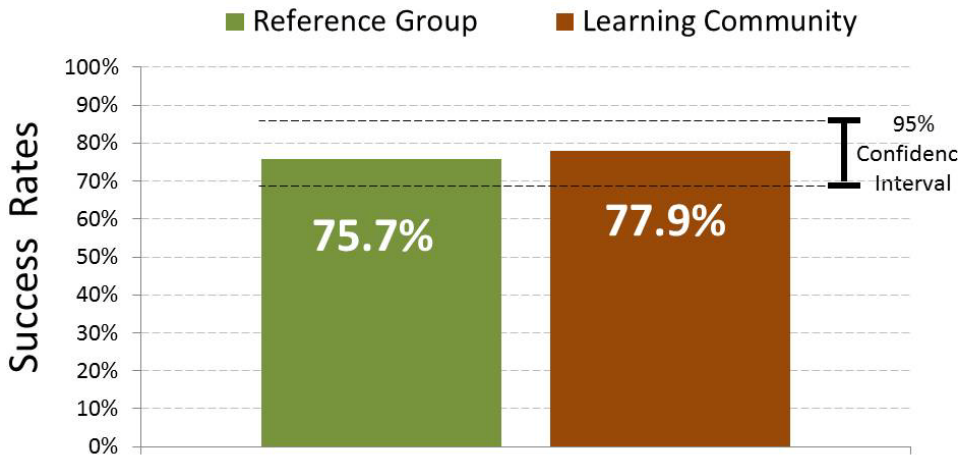
Return to Previous Section


Mandatory intrusive advising focused on programs of study
Accelerate entry to POS
Effective academic catch-up programs
Mandatory intrusive advising toward certificates degrees & transfer
Incentives to transfer with credentials
Enroll directly from High School
CONNECTION
ENTRY
PROGRESS
COMPLETION
First Time Student
Aggressive Financial Aid support
Shorter, faster, cheaper course design
Remove barriers to graduation
Successful Completion
Dual Enrollment & AP Credit
Emergency aid for students
Take placement test in High School
Programs to incentivize optimal attendance
Accelerated competency-based programs
Learn & Earn and Career Pathway Programs
Foster college-going norms in High School
Expand awareness of college programs and requirements
Student progress to completion monitored & feedback provided
Return to Previous Section

At the program level, assessment can appear to be quite a simple task…

Basic Skills Student

Learning Community



Successful Transfer

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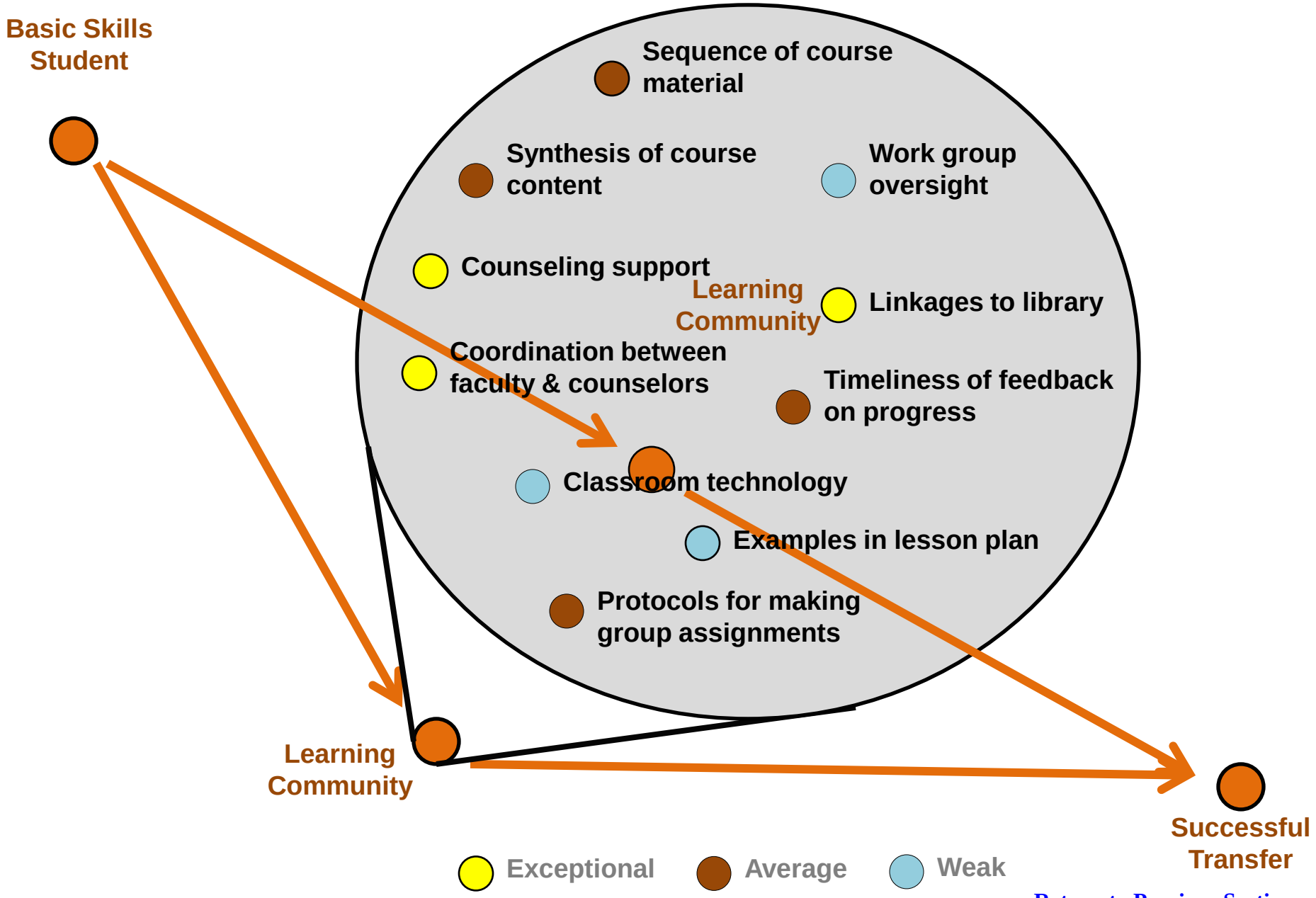
But to those on the ground, it's more complex



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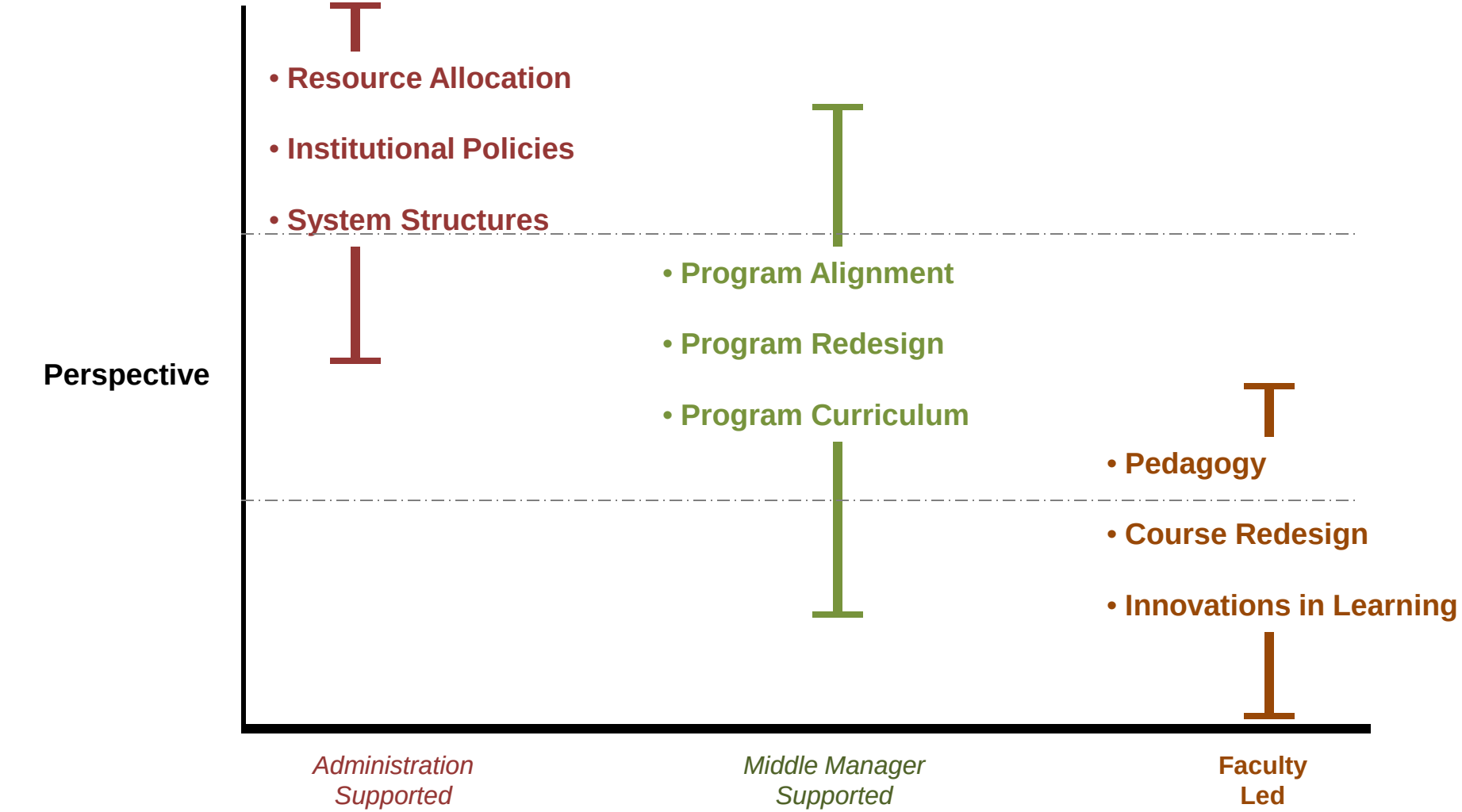
Place of Practice

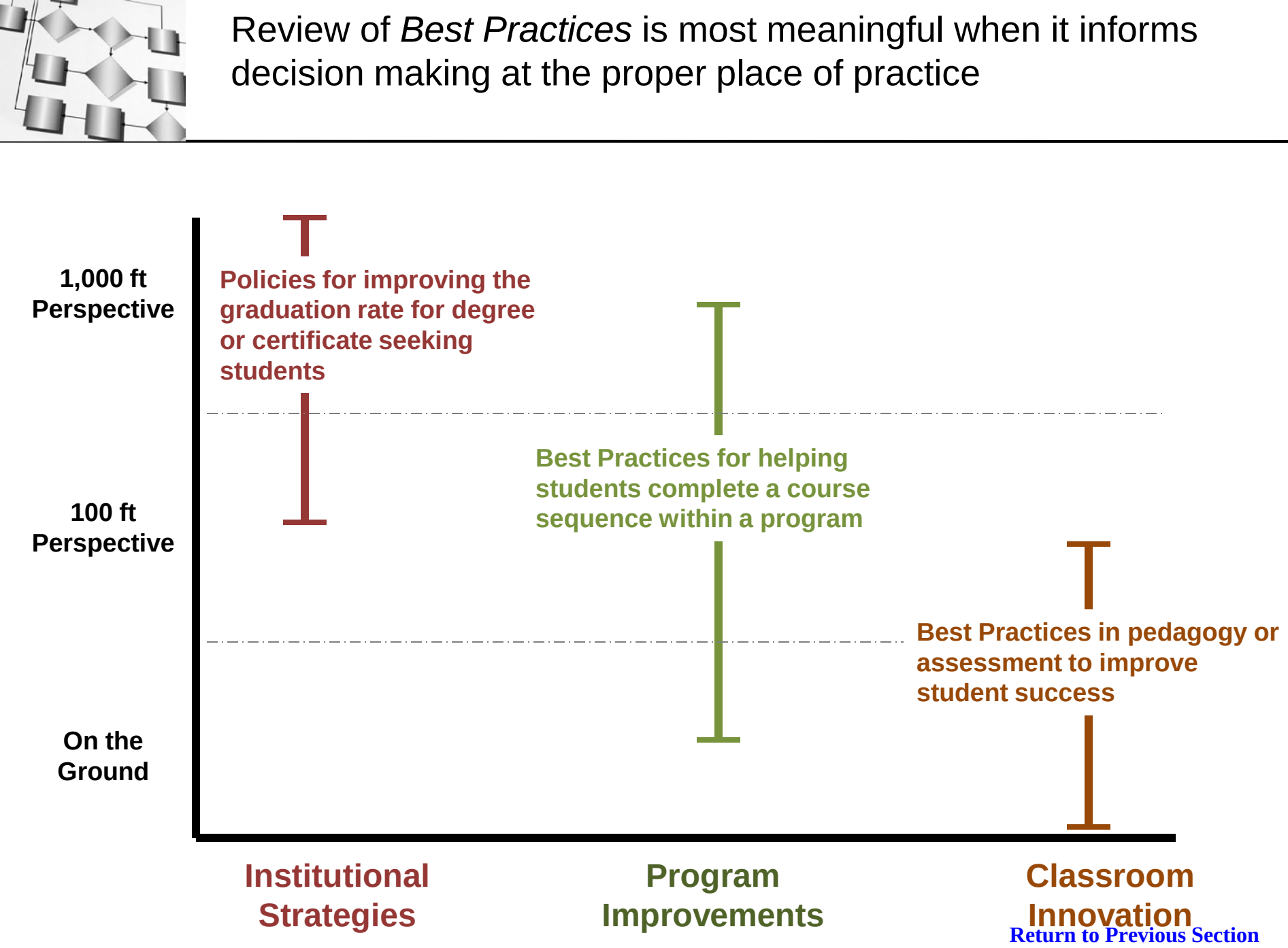
Return to Previous Section

Faculty-led innovation



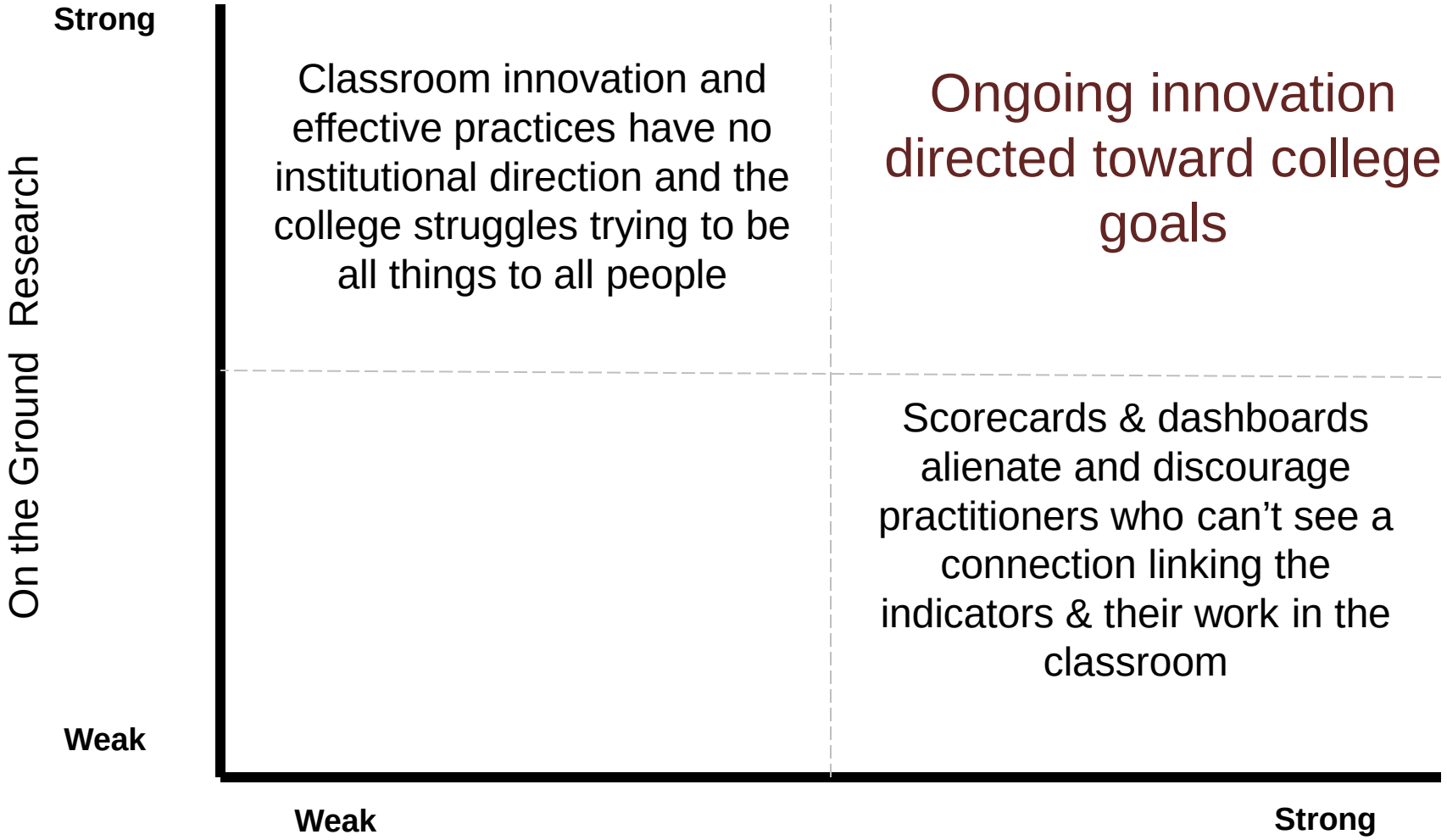
Return to Previous Section

Review of *Best Practices* is most meaningful when it informs decision making at the proper place of practice



Return to Previous Section

You need to properly scaffold information to get sustained forward progress



Return to Previous Section

Discussion

- Think about the Place of Practice and Meaningful Evidence slides
- What tailored, meaningful evidence do you think TAACCCT stakeholders will want to have?
  - Policymakers
  - System Office
  - Sr. College Administrators
  - Middle Managers
  - Classroom Faculty
  - Student Services Professionals

STAGE 3

Discuss evidence broadly

Engage a variety of campus stakeholders in evidence-based discussions about improvements in practice.

Data
do not
speak
for themselves.

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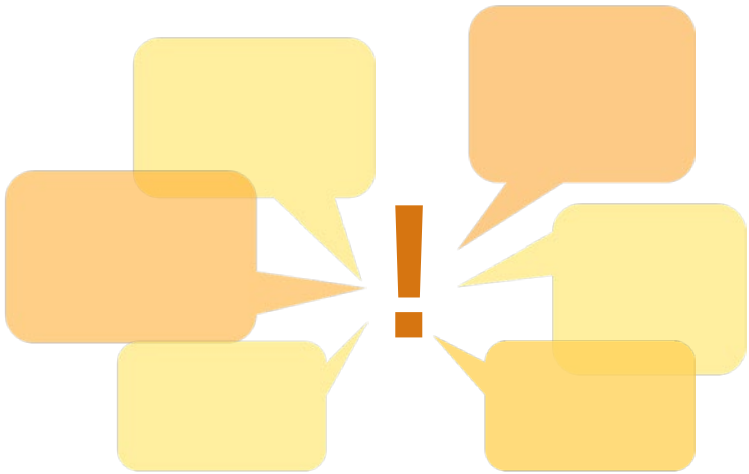
The vital role of conversation

- In order to make data useful, ample time and space are needed to discuss and analyze the information and connect it back to the original research question.
- Answers are not always immediately apparent, so skilled facilitation may be needed to dig out the deeper meaning.
- Multiple perspectives and types of information are often needed to make sense of individual data points.



Three Studies to Energize a Campus Conversation About Student Success

- Levels of Preparedness in GE Courses – success of simultaneously enrolled students in Math / English courses
- Grades & Success in Sequenced Courses
- Cohort Tracking in Developmental Education

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Study 1:
English & Math Preparedness & Success in GE Courses – A New Look

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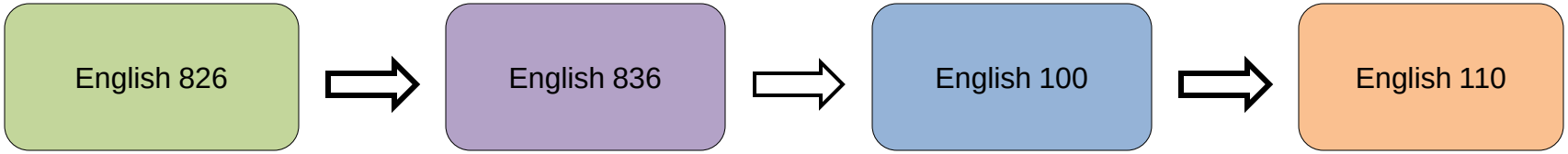
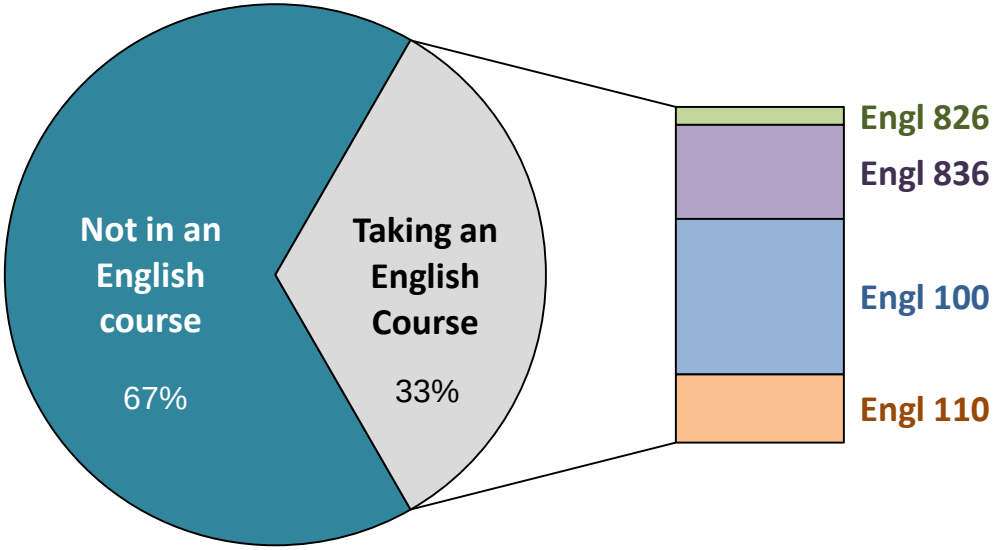
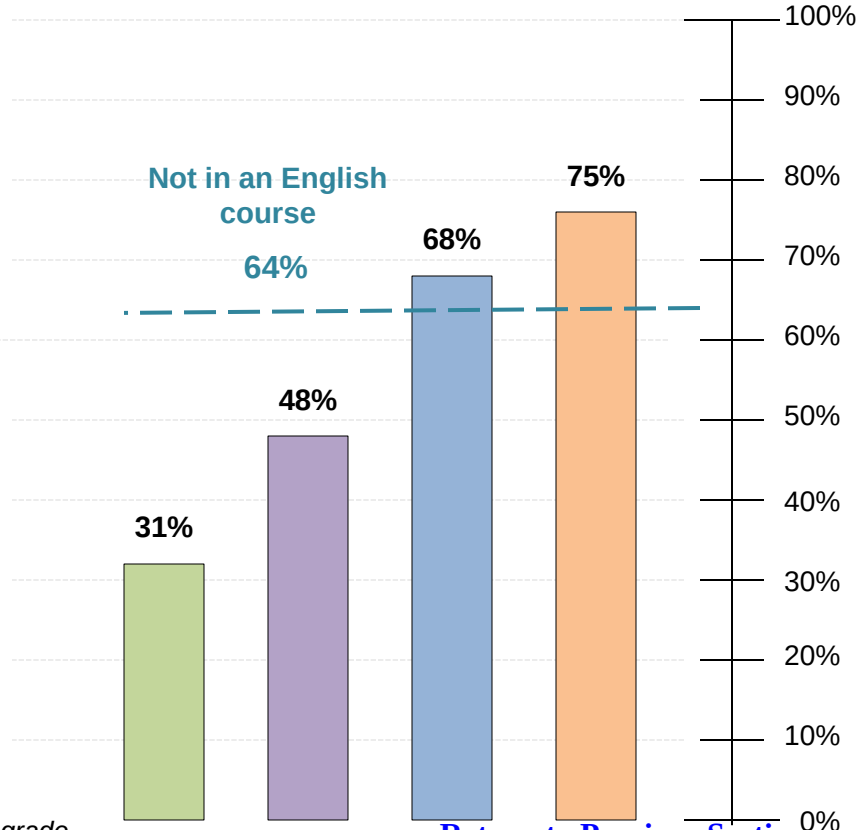
Success in Psychology 101 for students simultaneously enrolled in an English course



English course taking profile for students in Psychology 101



Success Rate of those same students in Psychology 101



Note: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade

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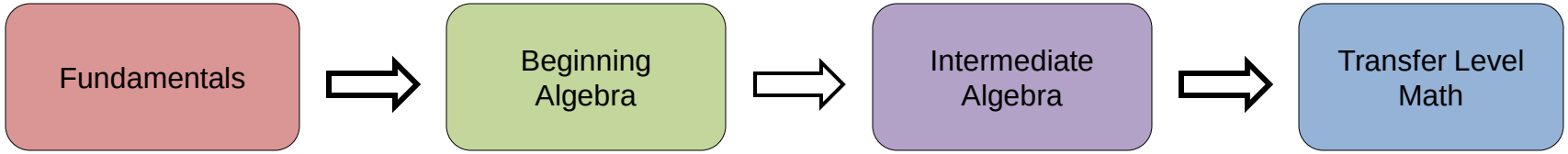
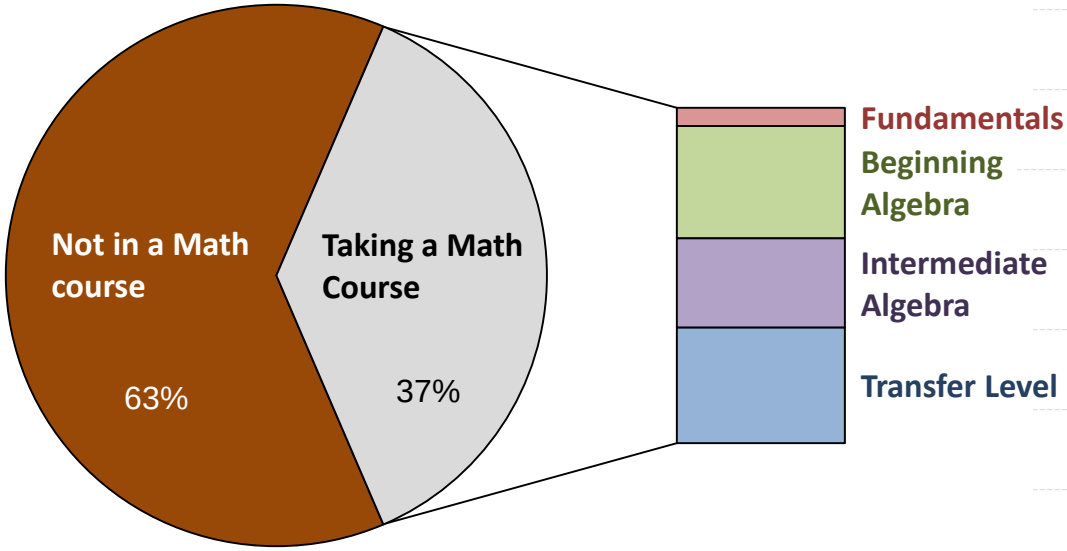
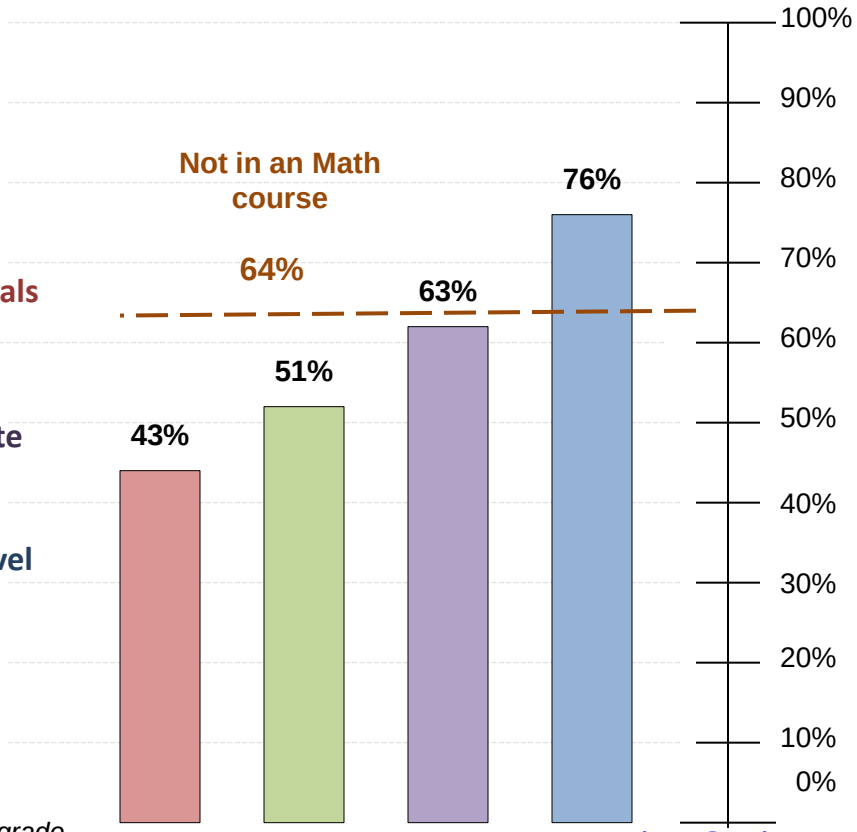
Success in Psychology 101 for students simultaneously enrolled in an Math course



Math course taking profile for students in Psychology 101



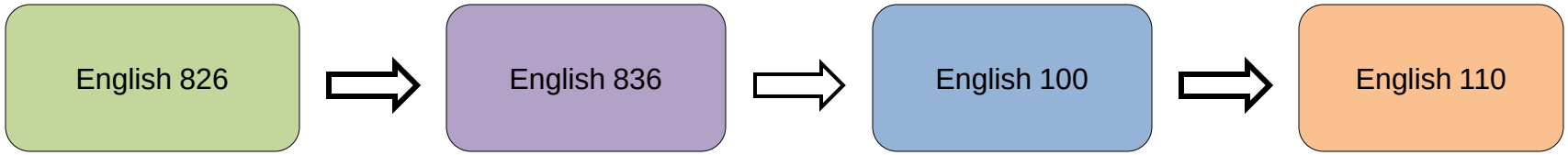
Success Rate of those same students in Psychology 101

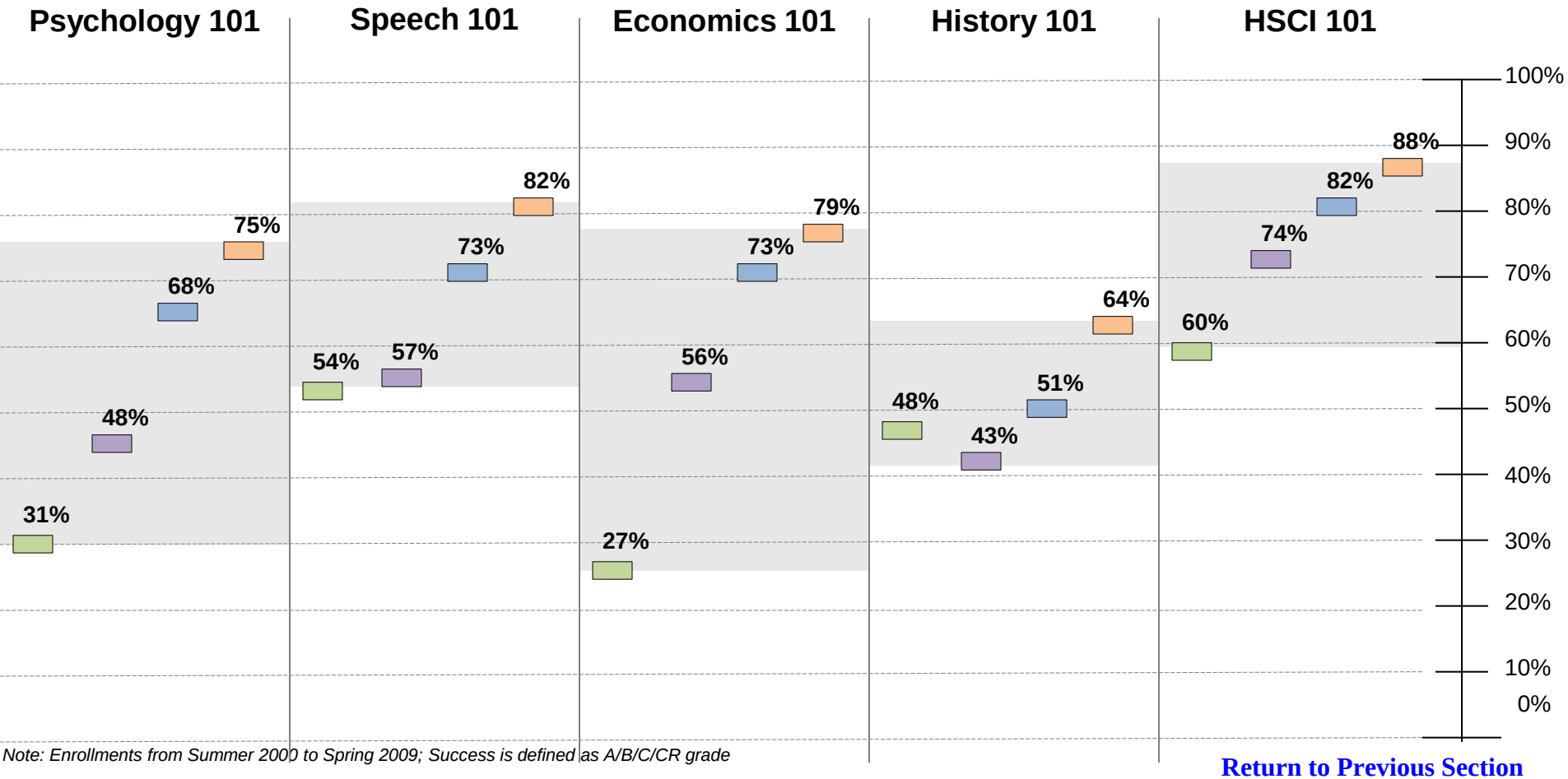


Note: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade

Return to Previous Section

Success in five highly enrolled GE courses by English enrollment level





Note: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade

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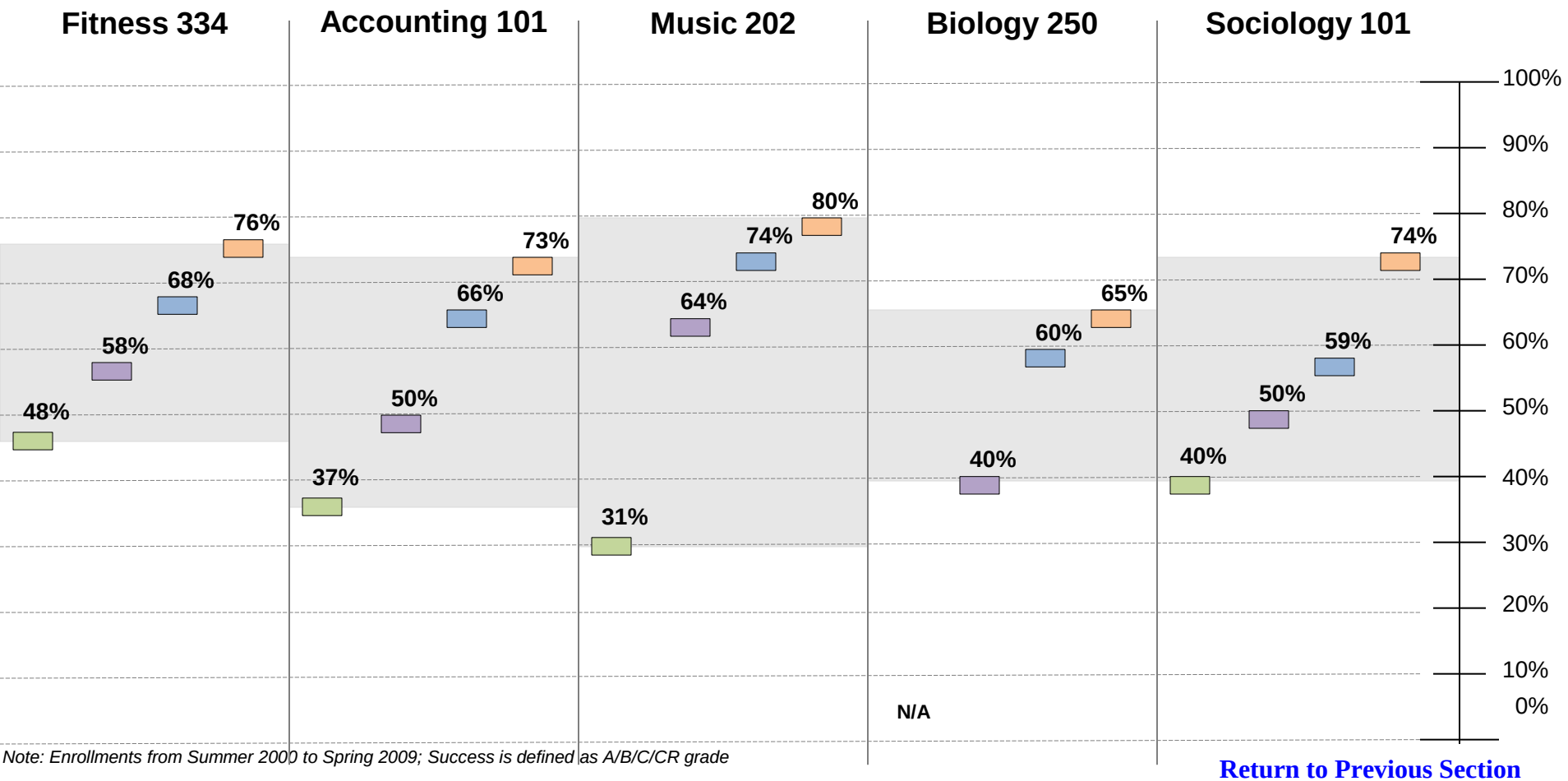
Success in five highly enrolled GE courses by English enrollment level

English 826 → English 836 → English 100 → English 110



Note: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade

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Study 2:

Grades in Sequenced Courses

Return to Previous Section

Basic Skills English Course Sequence

Two Levels below Transfer → One Level below Transfer → Transfer Level English

ENGL 826 → *ENGL 836* → *ENGL 100*

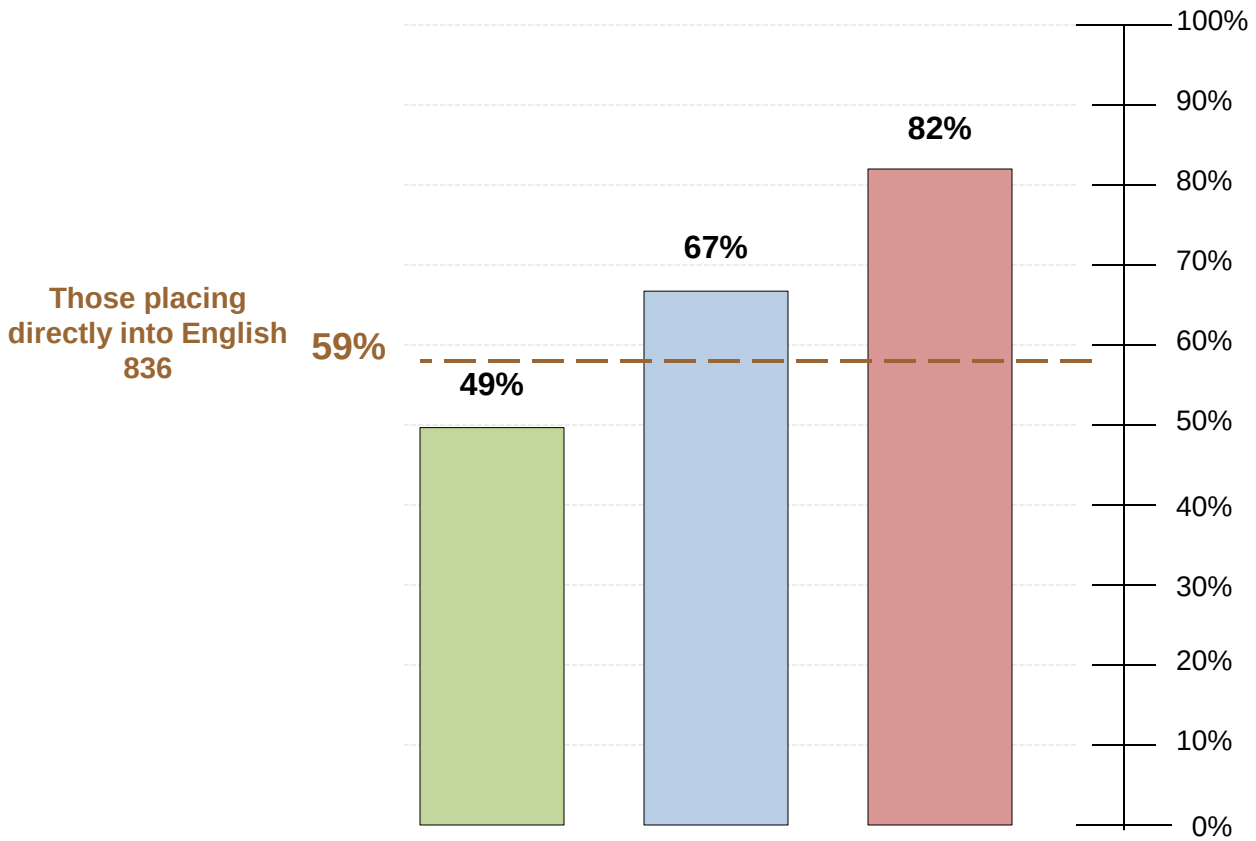
The grade received by students in English 826

A

B

C

Success Rate of those same students in English 836



Return to Previous Section

Basic Skills English Course Sequence

Two Levels below Transfer → One Level below Transfer → Transfer Level English

ENGL 826 → *ENGL 836* → *ENGL 100*

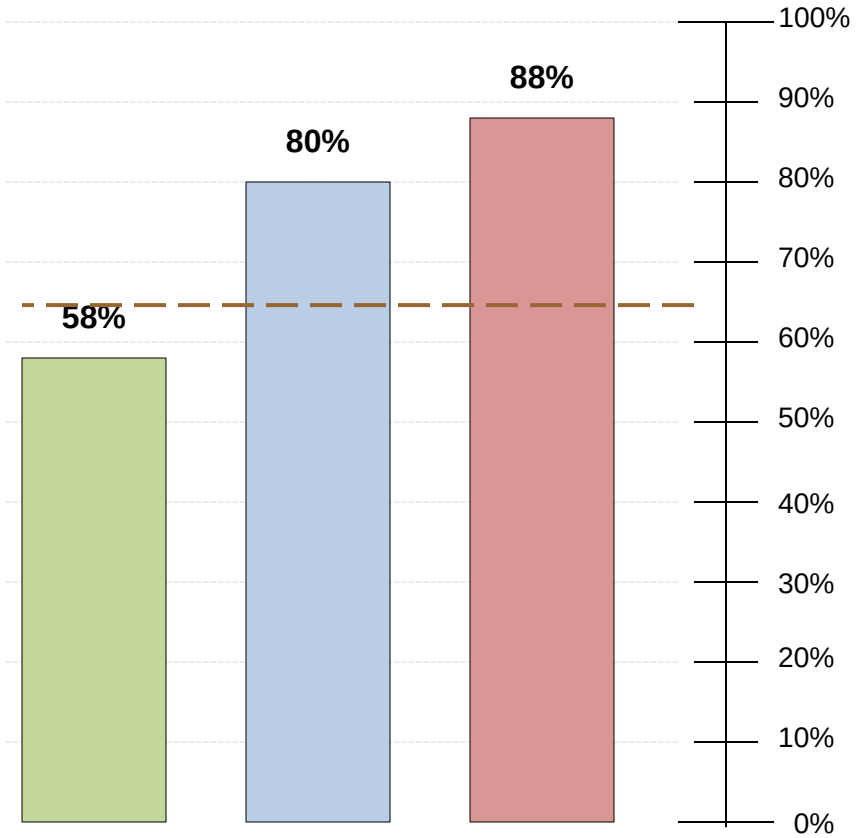
The grade received by students in English 836

A

B

C

Success Rate of those same students in English 100



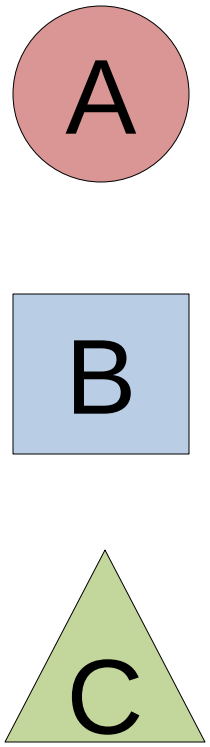
Return to Previous Section

Basic Skills Math Course Sequence

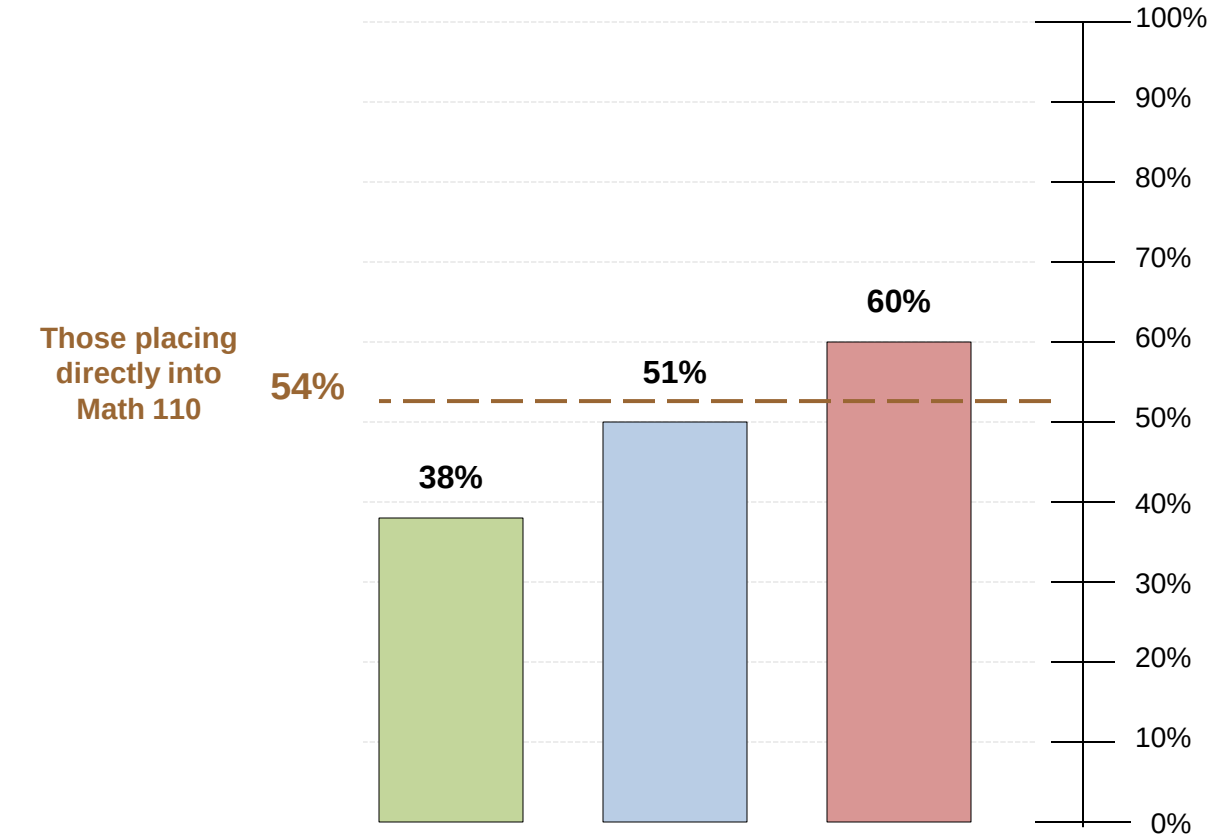
Three Levels below Transfer → Two Levels below Transfer → One Level below Transfer → Transfer Level Math

Math 811 *Math 110* *Math 120*

The grade received by students in Math 811



Success Rate of those same students in Math 110



Return to Previous Section

Basic Skills Math Course Sequence

Three Levels below Transfer → Two Levels below Transfer → One Level below Transfer → Transfer Level Math

Math 811 — *Math 110* — *Math 120*

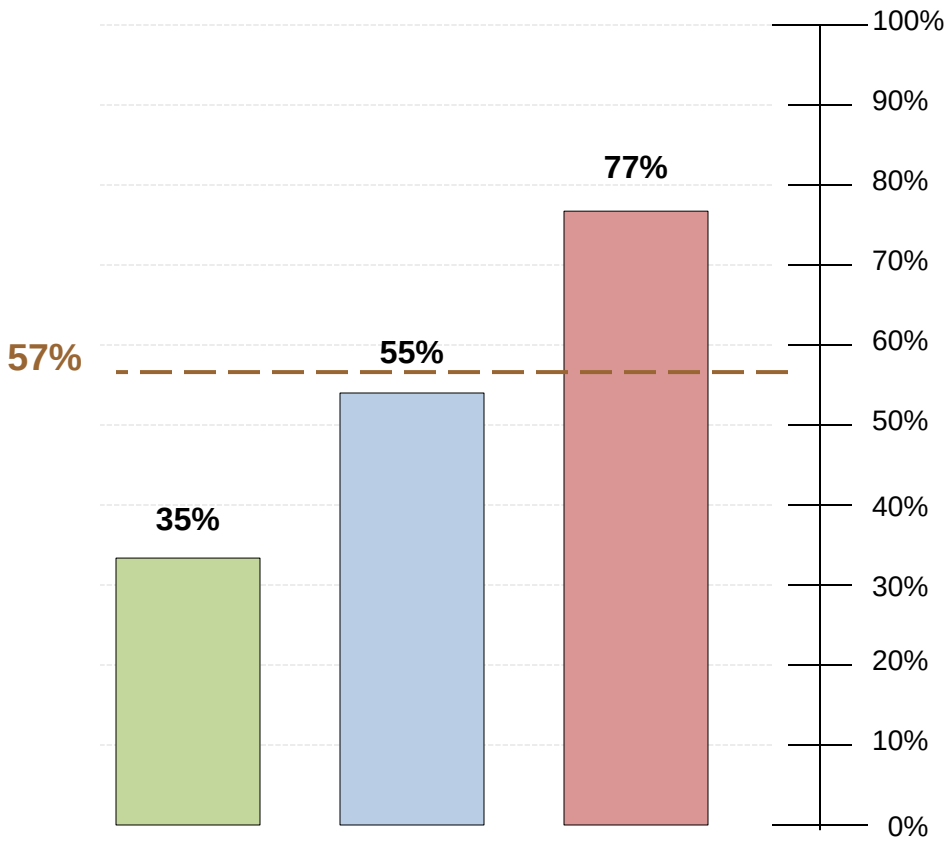
The grade received by students in Math 110

A

B

C

Success Rate of those same students in Math 120



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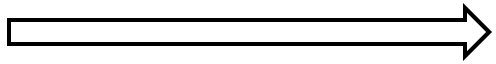
College Chemistry Course Sequence

General Chemistry I

CHEM 210



General Chemistry II

CHEM 220

The grade received by students in Chemistry 210

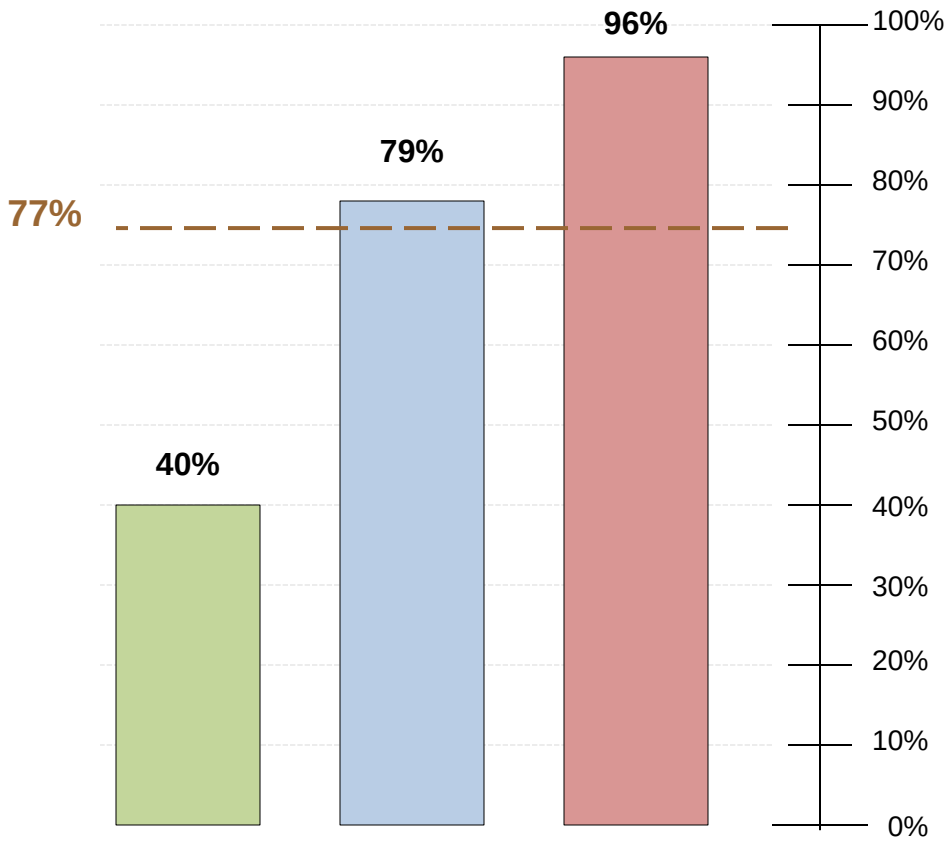
A

B

C

Success Rate of those same students in Chemistry 220

Those placing directly into Chemistry 220



Return to Previous Section

College Biology Course Sequence

Human Anatomy

BIO 250

Intro to Physiology

BIO 260

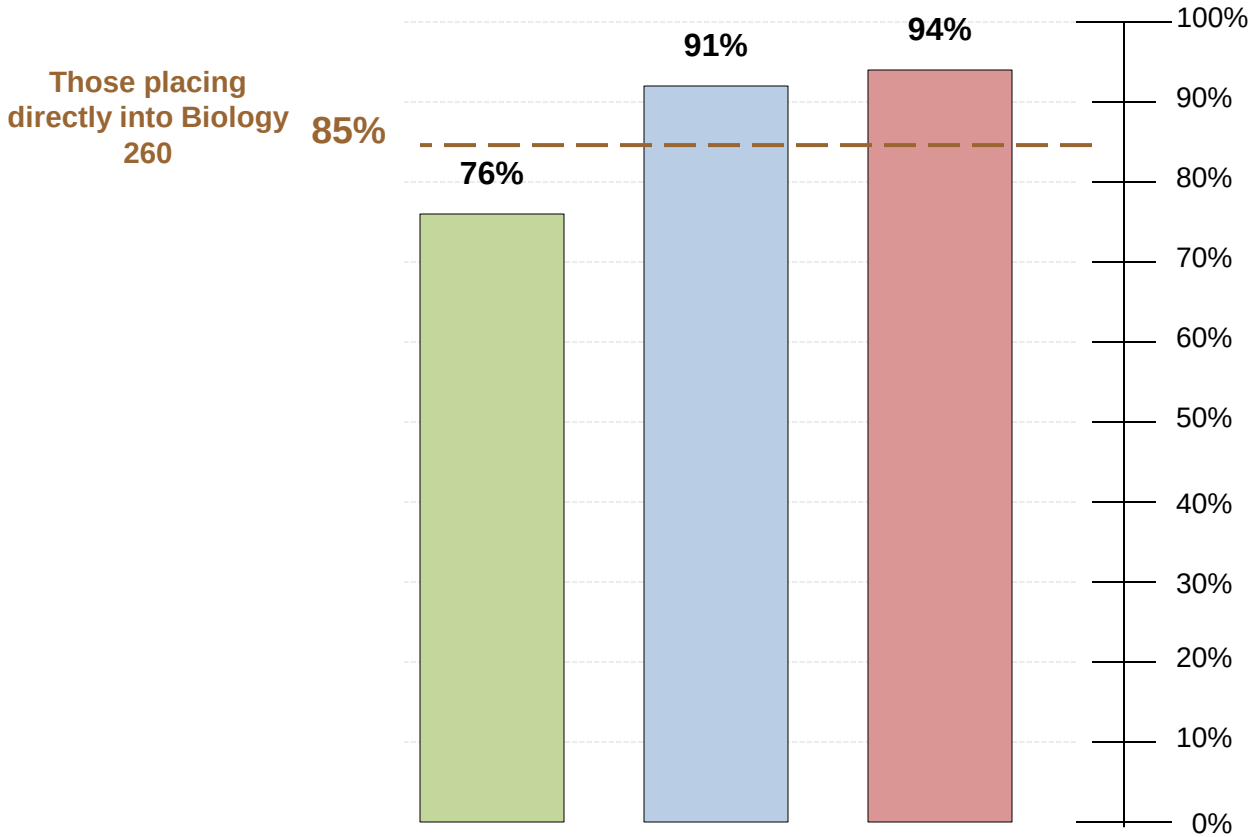
The grade received by students in Biology 250

A

B

C

Success Rate of those same students in Biology 260



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College Economics Course Sequence

Principles of Macro Economics

ECON 100

Principles of Micro Economics

ECON 102

The grade received by students in Economics 100

Success Rate of those same students in Economics 102

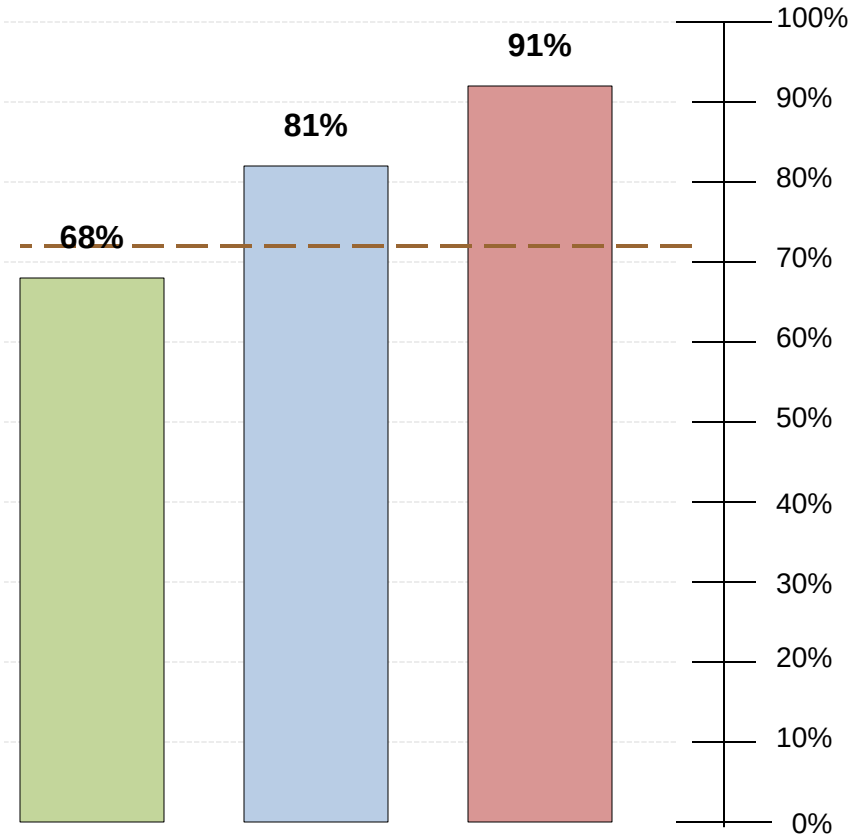
A

B

C

Those placing directly into Economics 102

71%



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Study 3:

Developmental Education

Cohort Tracking

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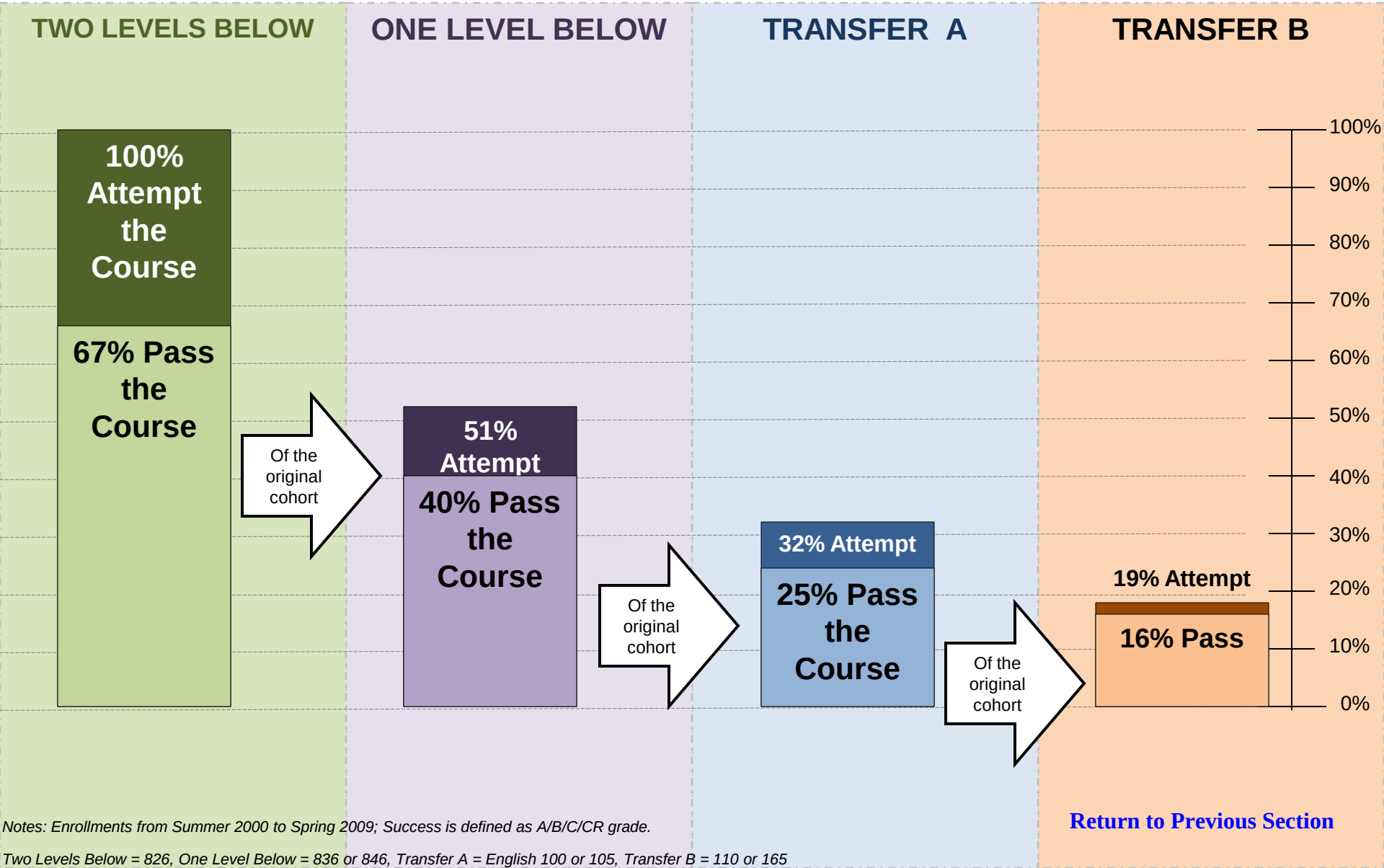
English cohort tracking starting two levels below transfer

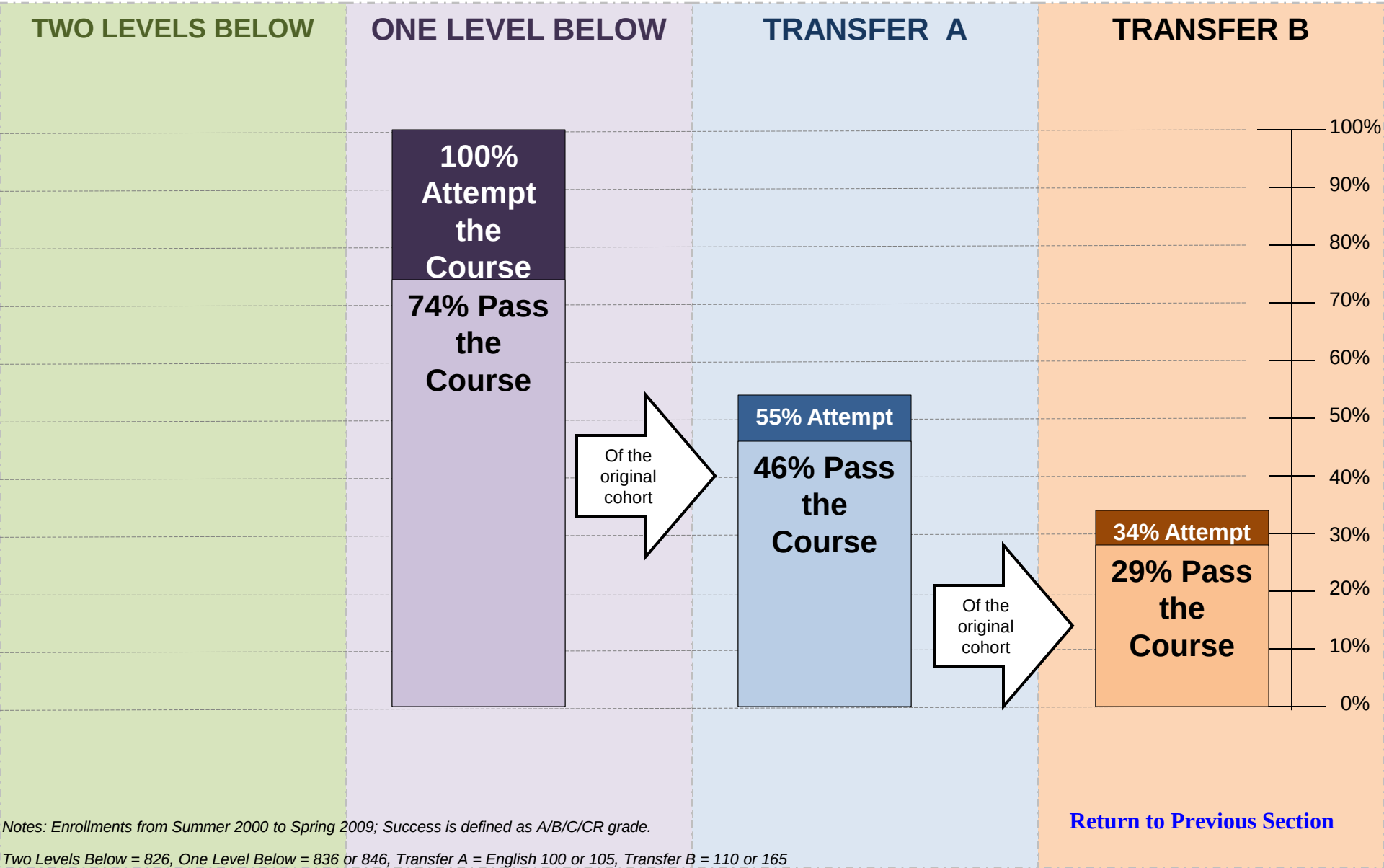


Notes: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade.

Two Levels Below = 826, One Level Below = 836 or 846, Transfer A = English 100 or 105, Transfer B = 110 or 165

Return to Previous Section

English cohort tracking starting one level below transfer

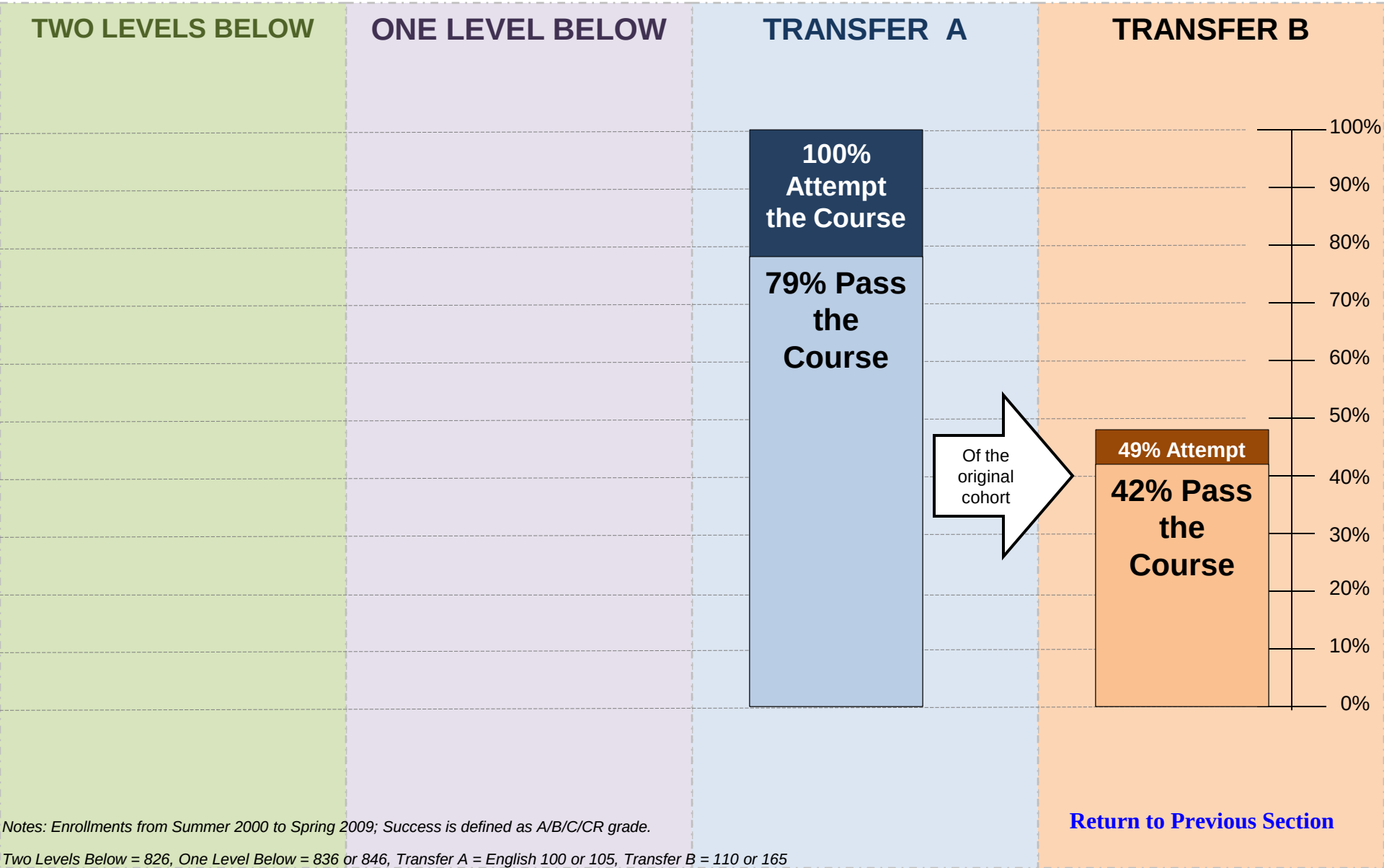


Notes: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade.

Two Levels Below = 826, One Level Below = 836 or 846, Transfer A = English 100 or 105, Transfer B = 110 or 165

Return to Previous Section

English cohort tracking starting at Transfer A

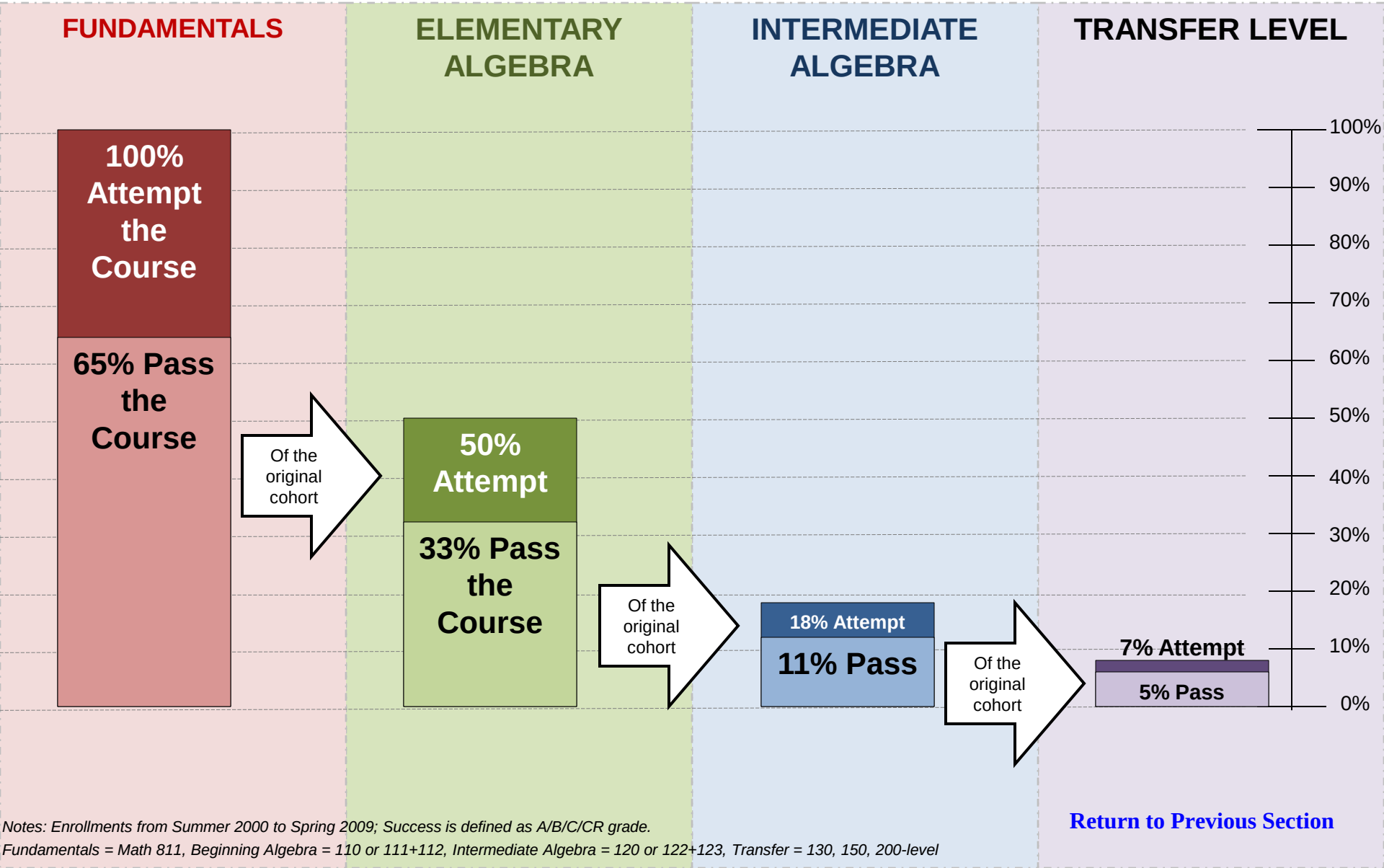


Notes: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade.

Two Levels Below = 826, One Level Below = 836 or 846, Transfer A = English 100 or 105, Transfer B = 110 or 165

Return to Previous Section

Math cohort tracking starting in Fundamentals



Notes: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade.
Fundamentals = Math 811, Beginning Algebra = 110 or 111+112, Intermediate Algebra = 120 or 122+123, Transfer = 130, 150, 200-level

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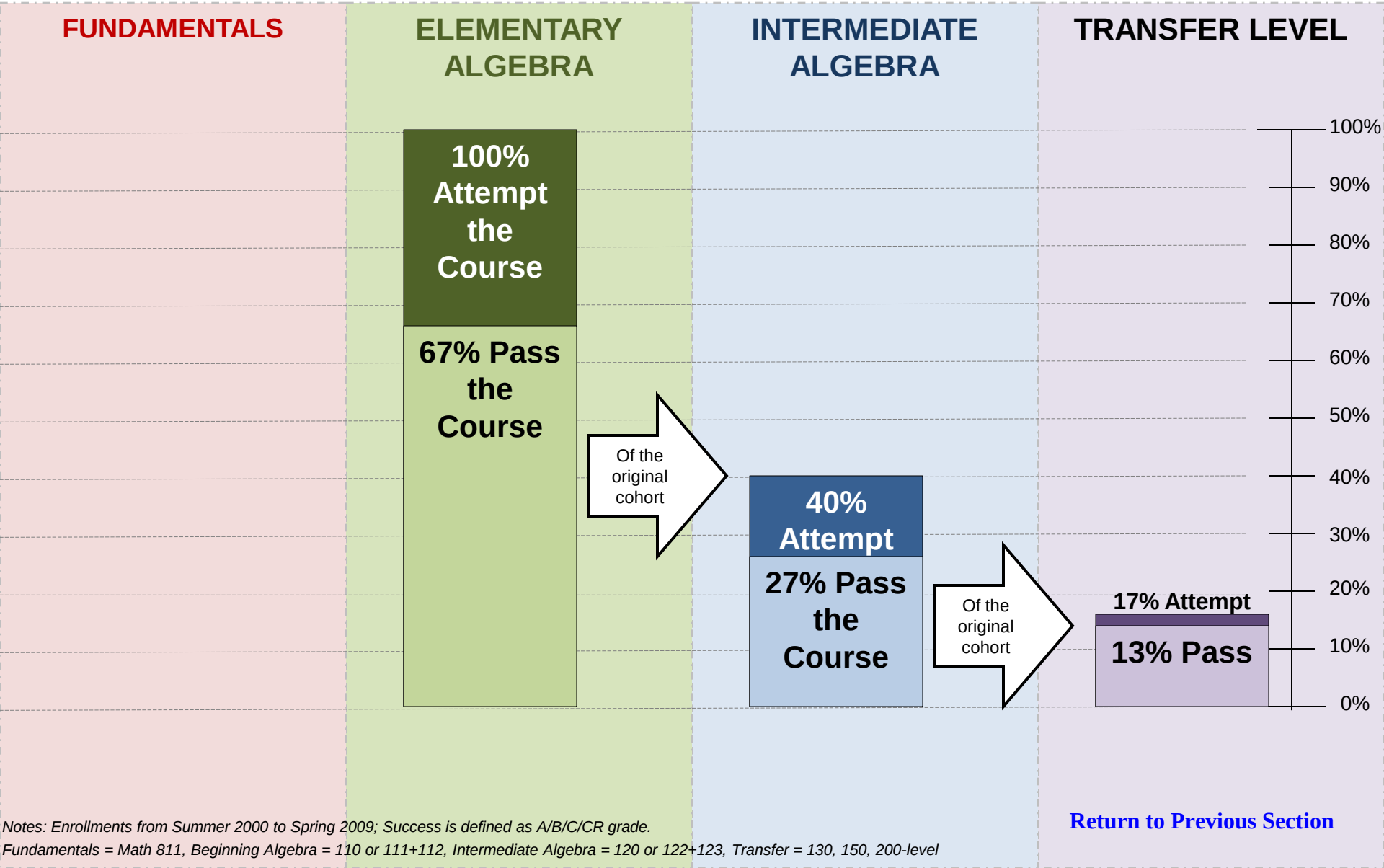
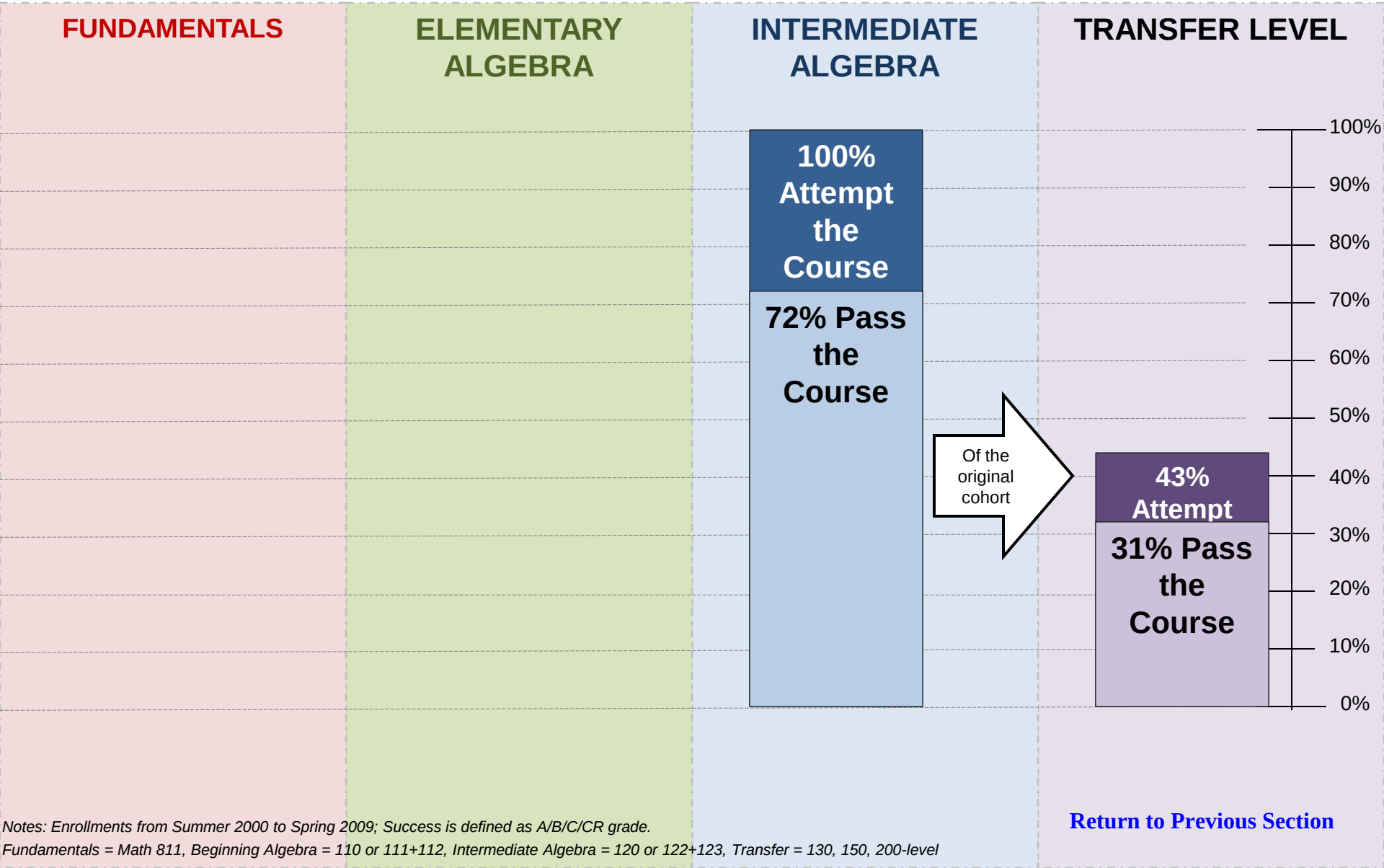
Math cohort tracking starting in Elementary Algebra



Notes: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade.
Fundamentals = Math 811, Beginning Algebra = 110 or 111+112, Intermediate Algebra = 120 or 122+123, Transfer = 130, 150, 200-level

Return to Previous Section

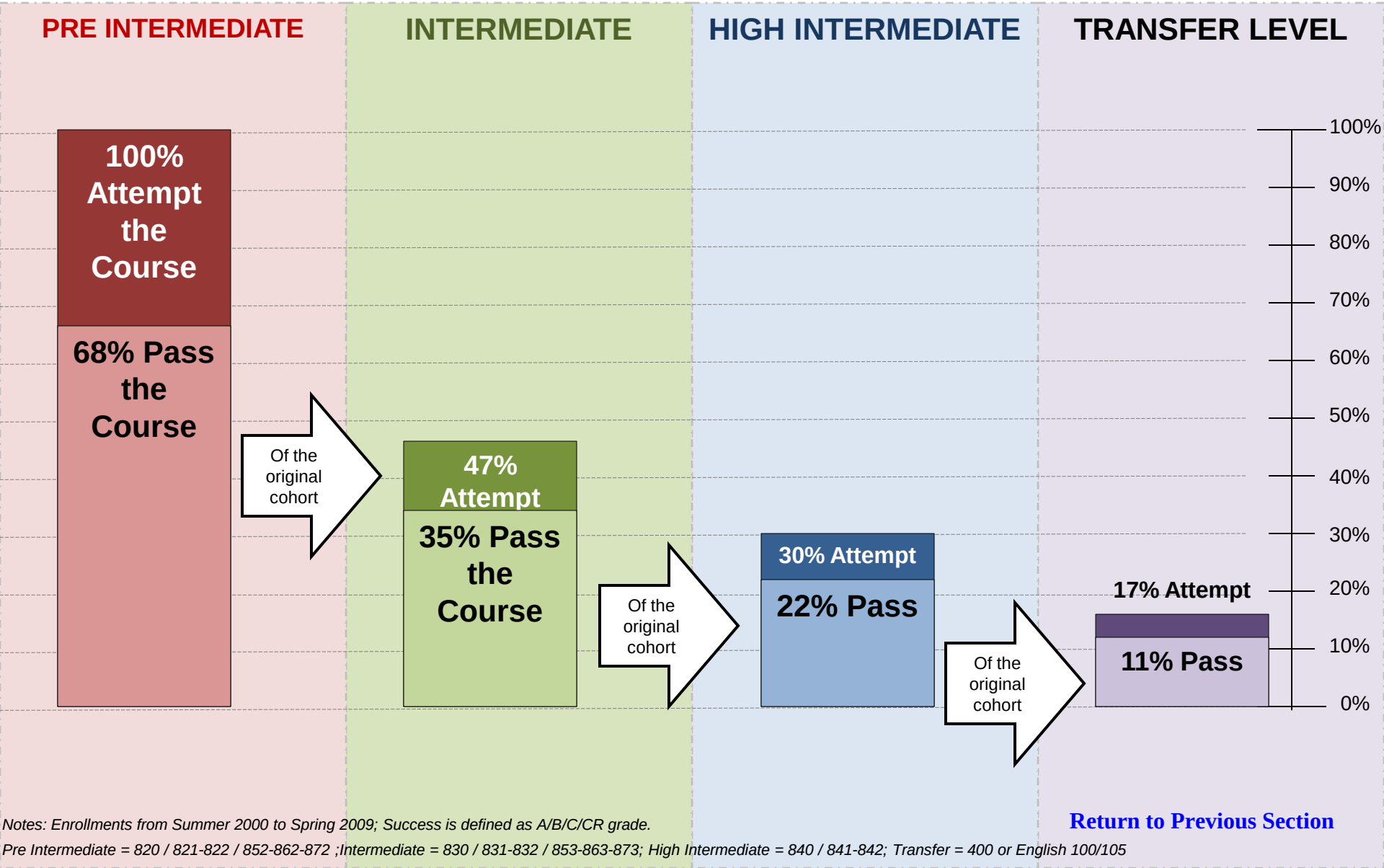
Math cohort tracking starting in Intermediate Algebra



Notes: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade.
Fundamentals = Math 811, Beginning Algebra = 110 or 111+112, Intermediate Algebra = 120 or 122+123, Transfer = 130, 150, 200-level

Return to Previous Section

ESL cohort tracking starting in Pre Intermediate



Notes: Enrollments from Summer 2000 to Spring 2009; Success is defined as A/B/C/CR grade.

Pre Intermediate = 820 / 821-822 / 852-862-872 ;Intermediate = 830 / 831-832 / 853-863-873; High Intermediate = 840 / 841-842; Transfer = 400 or English 100/105

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Discussion

- Think about these three studies. What strikes you about these approaches to looking at student success?
- Where can your college or system create the time and space to engage in these types of explorations, and transition them into action steps?

STAGE 4

Use evidence to inform change

Implement changes in practice and policy based on analyses and discussion of college evidence.

Use evidence to guide innovation

- In this context, research and applied inquiry are fundamentally interventionist in nature.
- We are not seeking absolute truths; rather we are looking for patterns of evidence that inform action-oriented decisions.
- Failure can be seen as an opportunity for learning, especially when outcomes are shared and used to inform further improvements in practice.

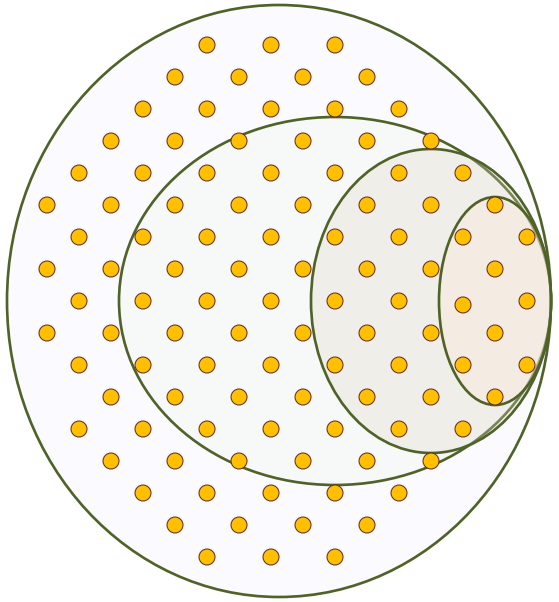
And what do we do when the evidence is ambiguous?

What to do when you reach the limits of your research and yet still face multiple choices?

The process of inquiry is not a search for an absolute truth

Trust your expertise & choose !

Domain of possible solutions



We answer the questions that eliminate dead end solutions

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STAGE 5

Measure the impact of change

Evaluate the impact of practice changes on student performance.

When testing innovations, make sure you are focusing on the right data.

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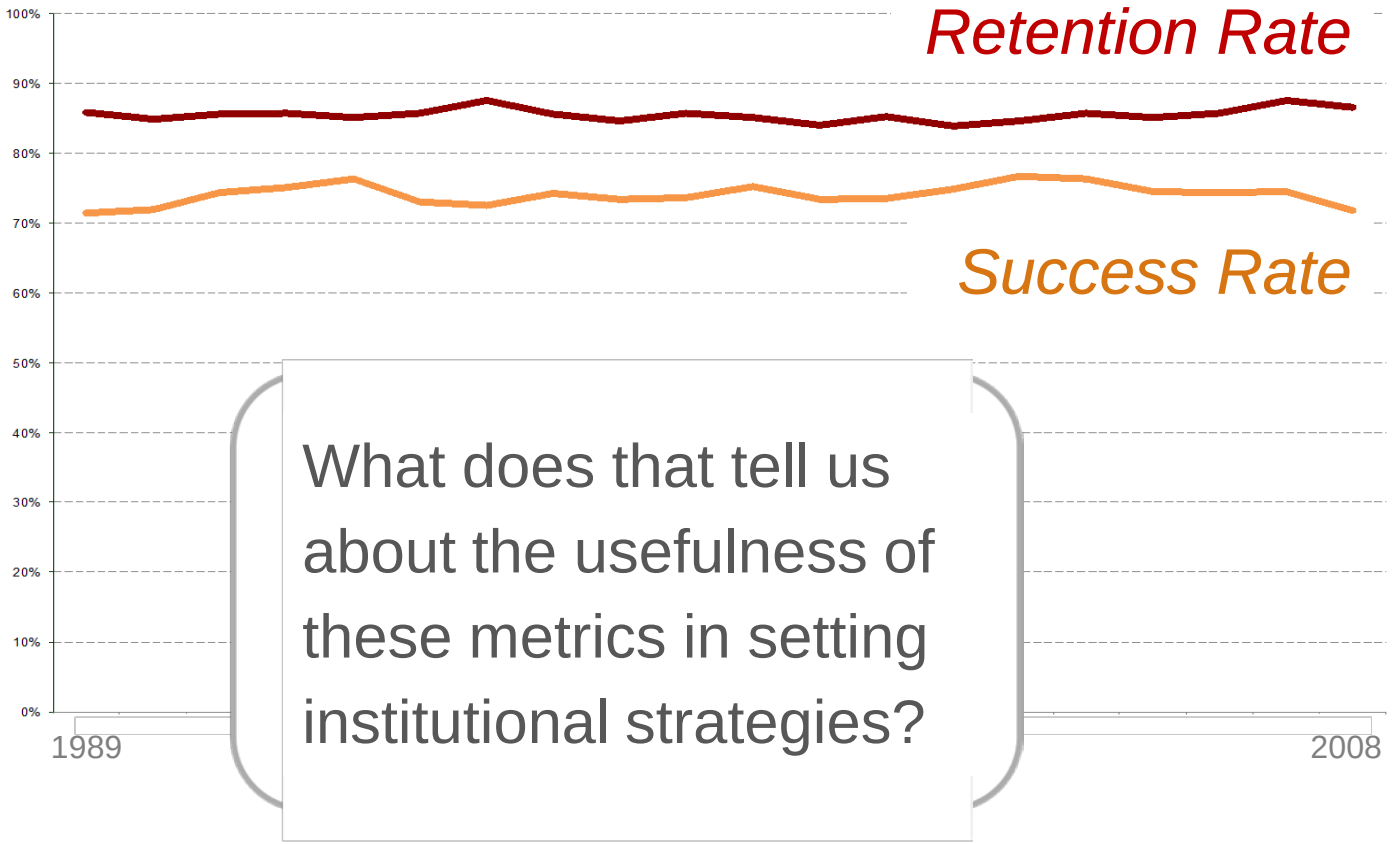
20 year trend for institutional outcomes



What does that tell us about the usefulness of these metrics in setting institutional strategies?

Next Steps

- What are some “quick win” opportunities for demonstrating the value of TAACCCT programs to practitioners and stakeholders?
- What are some of the challenges to developing or further evolving a culture of inquiry around the TAACCCT programs?

APPENDIX A.II

GENERAL PRINCIPLES FOR CREATING COMPARISON GROUPS

This appendix section presents the PowerPoint slides from a presentation designed to provide TAACCCT grantees with an overview of the principles for creating comparison groups that meet both DOL and evaluation standards for providing information that will enhance program quality. The presentation was given at a TAACCCT Evaluation & Measurement Convening on August 7 and 8, 2012. The convening was sponsored by BMGF and hosted by Mathematica and CCRC.

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CCRC COMMUNITY COLLEGE RESEARCH CENTER
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

MATHEMATICA Policy Research

General Principles for Creating Comparison Groups

Back to Previous Section

What is internal validity?

- How do we know that a program is successful?
  - Anecdotes?
  - Surveying program completers?
  - Interviewing employers?
- DOL/funders/administrators/policy-makers may want evidence of the success that is more "rigorous"
- A rigorous, well-implemented evaluation can provide credible/compelling evidence of a program's impact

➢ ***An evaluation that is internally valid provides credible/compelling evidence of a program's impact.***

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Goals

- Illustrate importance of comparison group
- Identify components of a rigorous evaluation that funders/administrators will find as compelling evidence of success
- Determine potential threats to validity of TAACCCT evaluations
- Establish solutions to improve the internal validity of each evaluation

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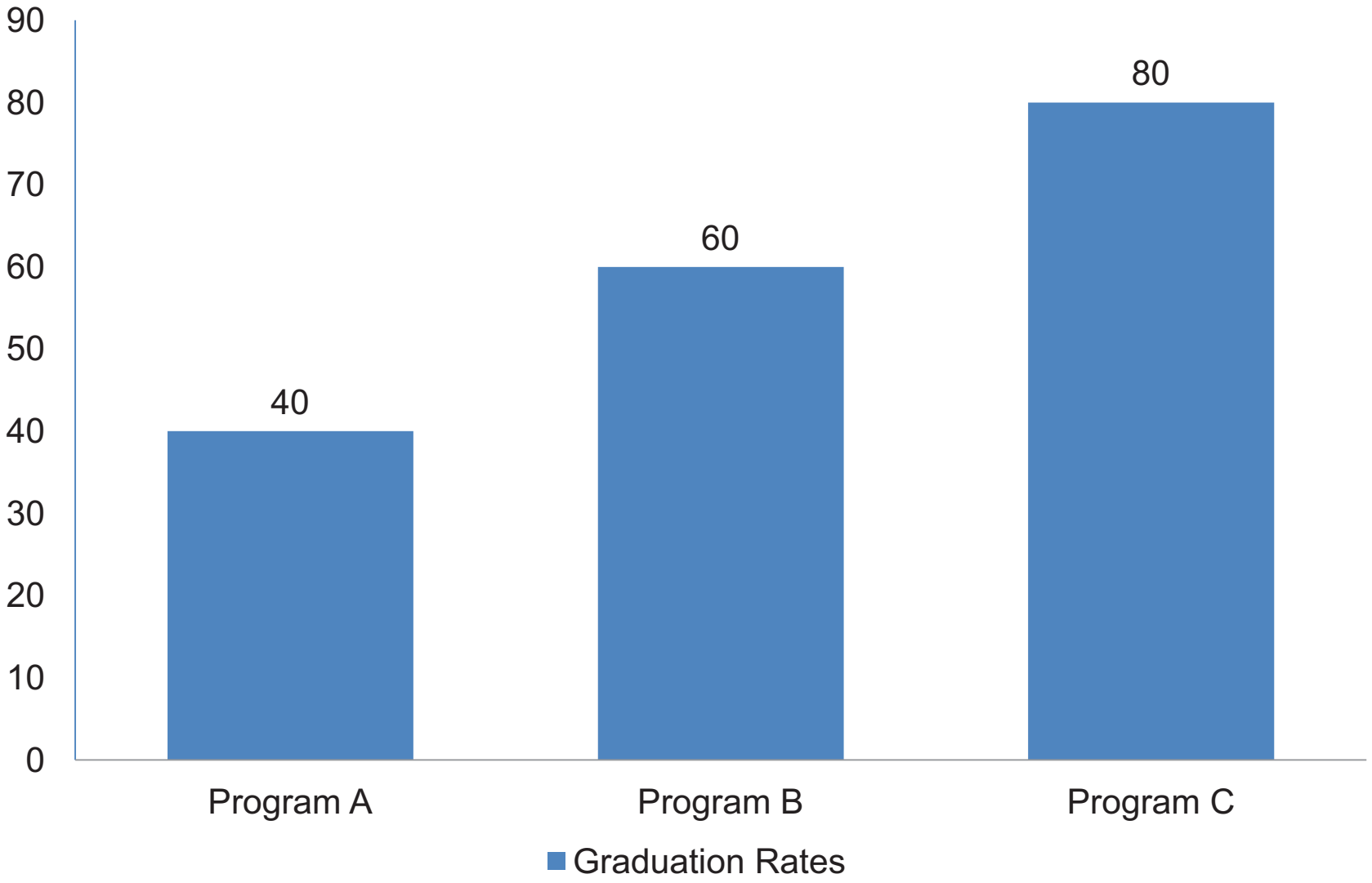
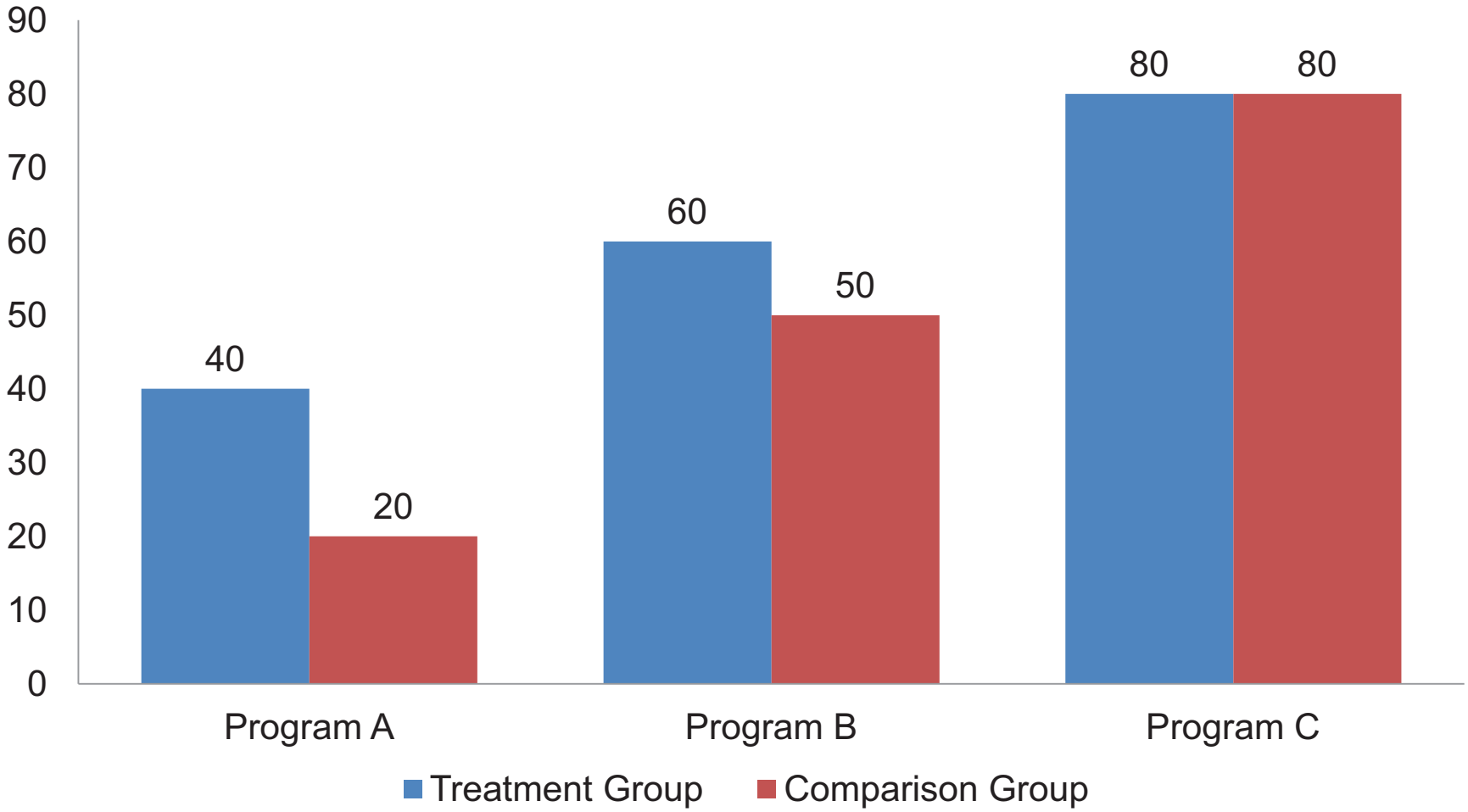
Treatment group results can be deceiving



Back to Previous Section

… What would have happened without the program (similar comparison group)



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A comparison group is a step in the right direction…

- But having a comparison group is not a panacea…
- The credibility of our treatment vs. comparison "effect" depends on the extent to which the only difference between the two groups is participation in the program

➢ ***A comparison group is necessary but not sufficient to appropriately articulate the effects of a program on outcomes.***

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A randomized controlled trial (RCT) serves as the "gold standard" for demonstrating the impact of a program

- Students randomly assigned to receive the program or not
- Only difference between the students is receipt of the program
- And thus, differences in outcomes (e.g., graduation rates) are solely due to differences in the program that the students receive

➢ ***RCTs allow for the best evidence of program effectiveness because they ensure that students are "similar" across conditions.***

Back to Previous Section

What do we need to do to convince a skeptical critic?

- We need to do more to convince our audience that the evidence is compelling…
- Though the results may be seen as providing a lower tier of evidence

➢ ***It is possible to demonstrate credible program impacts without a RCT – but there will be caveats to the findings.***

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Components of an internally valid comparison

- A rigorous impact evaluation should be able to mitigate the following threats to an internally valid comparison *(Campbell & Stanley, 1963)*:
  - Selection
  - History
  - Instrumentation

➢ ***There are three key threats to internal validity that we should keep in mind.***

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Selection threat

- Students in treatment and comparison groups are very different from each other
  - For example, treatment group has better employment history than comparison group
- At end of program, we observe differences in student earnings, and it's impossible to distinguish whether differences are due to
  - The true effect of the program, or
  - Differences in the students at baseline that persist

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Mitigating the selection threat

- Choose a good comparison group that has students that are similar to the treatment students
- Show that the students are similar to each other at baseline
  - Provide means/standard deviations for treatment and comparison groups on variables that are expected to be related to the outcome
  - Especially "pretest" types of measures of student academic outcomes and previous employment/earnings
- Statistically control for baseline differences in final impact analyses

Back to Previous Section

History threat

- External events cause the observed changes in earnings
- Only a problem in studies where prior year cohort(s) is/are compared against a current cohort
- Example:
  - Treatment group = 2012 graduating cohort
  - Comparison group = 2011 graduating cohort
  - Context: Economy improves in 2012, and everyone in the treatment group gets a high-paying job
- The observed differences we see in earnings are due to
  - The true effect of the program, or
  - The external event of general economic improvement

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Mitigating the history threat

- Use available data from another set of students (not those in the treatment or comparison groups)
  - For example, two cohorts of students in different programs from treatment and comparison groups

- Compare differences in outcomes over time for this additional set of students, relative to differences observed in the treatment and comparison groups

➢ ***This is really an exercise in convincing a critical reader that an earlier cohort is a valid comparison group.***

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Instrumentation threat

- Differences in how the outcome of interest is measured across treatment and comparison groups confounds the observed difference
  - Treatment group = wage data obtained through DOL
  - Comparison group = wage data obtained through survey
- Observed differences in the outcome due to
  - The true effect of the program, or
  - The differences in the outcomes obtained across the two sources

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Mitigating the instrumentation threat

- Don't use two different data sources (or different methods) for obtaining outcome measures
- If it's necessary to use two data sources, try to obtain data from both sources for some students
  - Show that the data are similar across both sources (e.g., correlation of outcomes across sources, magnitude of difference in outcomes across sources)

➢ ***Like the history threat, this is really an exercise in convincing a critical reader that instrumentation differences are not a problem.***

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Best practices for comparison group studies

(Based on the WWC Standards)

- Show impacts on outcomes that are reliable
- Demonstrate the equivalence of the analytic sample at baseline (mitigate the selection threat and history threat, if applicable)
  - Statistically adjust for any baseline differences in impact analyses
- Do not have a systematic difference between the treatment and comparison groups
  - No systematic difference in data collection elements (mitigate instrumentation threat)
  - No "confounding factors" that align with the treatment being tested

➢ ***Follow WWC standards for compelling research evidence!***

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APPENDIX A.III

PERFORMANCE REPORTING

This appendix section contains a handout on creating comparison cohorts for evaluation and performance reporting requirements. It was developed to complement the information in the presentation detailed in Appendix A.II and provide deeper insights on creating comparison groups that will enhance program quality.

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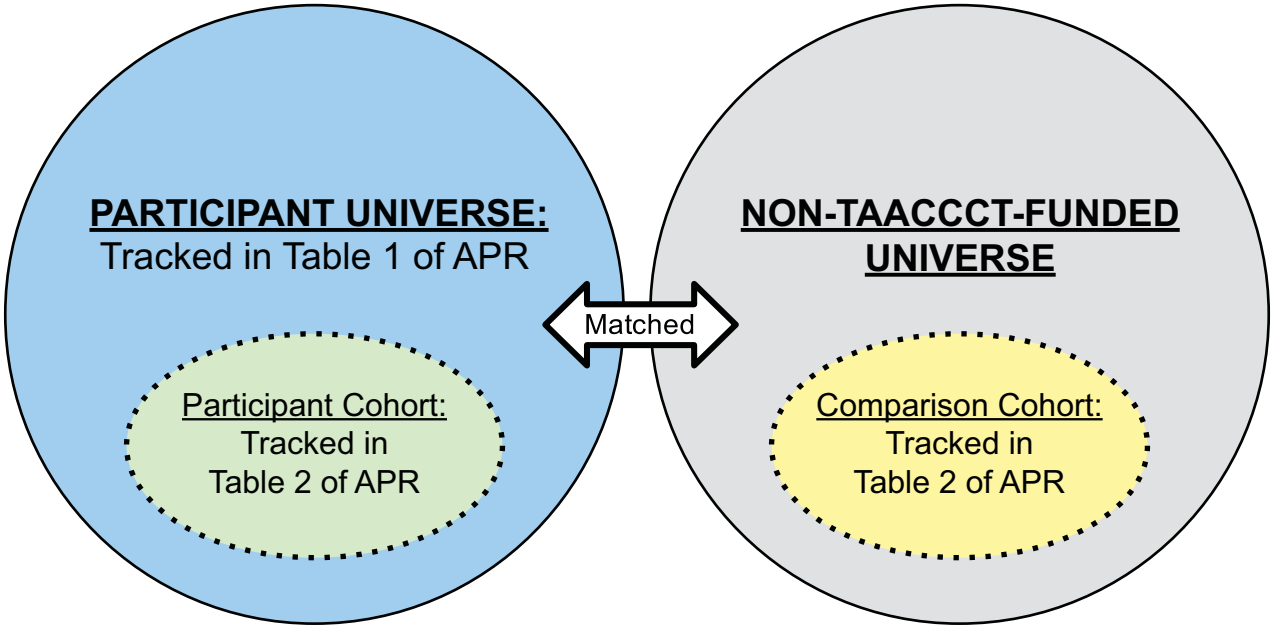
Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant Program Performance Reporting

Overview:
First, let's take a look at a diagram that will help illustrate the relationship between participant and comparison cohort groups.



As you can see here, the blue circle represents all of the participants who are enrolled in TAACCCT funded courses and represent the "participant universe." These are individuals who will be tracked in the first table of the Annual Performance Report (APR). A subset of these participants will be selected for the participant cohort. They will be tracked separately for their outcomes and will be defined by an average age and gender breakdown.

Then we have in the gray circle, all of the individuals who are in non-TAACCCT funded courses. A subset of these students will be tracked for the same outcomes as the participants in the participant cohort and will need to mirror the participant cohort in several ways, such as demographics and program of study.

A comparison cohort acts like a "surrogate" for what program recipients would have been like if they had not been in the program

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Instead of a one-to-one match, a comparison cohort is a group whose overall profile is similar to the participant group. The difference in the gain that each group has made over the same time period is an estimate of the effect of the program

Comparison cohorts should be as much like the participant group as possible, especially on characteristics that are related to desired outcomes (to help eliminate variability outside of program effects). So, it is ideal to control as many variables as possible, when possible. Some examples of matching criteria are:

- Demographic background (required: Age/Gender)
- Operating environment (locality, available resources, etc)
- Recruitment characteristics (to avoid differences in self-selection)
- If possible, outcome indicators like motivation and skills
- Prior work experience

So, basically, you are tracking two similarly composed groups for the same program of study along similar time duration, with the main difference being the TAACCCT funding.

Features of a high-quality comparison cohort
First, the participant and comparison cohorts must be matched on key individual and program characteristics, and ideally, these would be things that would most likely affect the outcomes. Some examples are program of study, length of program, and demographics.

Also each cohort groups should have a sufficient number of students and students in both participant and comparison cohorts should have the same length of time to achieve outcomes.

Participant cohorts: Rules
Grantees will need to have a different participant cohort for each program of study developed with grant funds. For example, if you identified in your Statement of Work that you would develop two new programs of study with grant funds, you should have two participant cohorts and each of these participant cohorts will have its own comparison cohort (but we will cover comparison cohorts later in this presentation).

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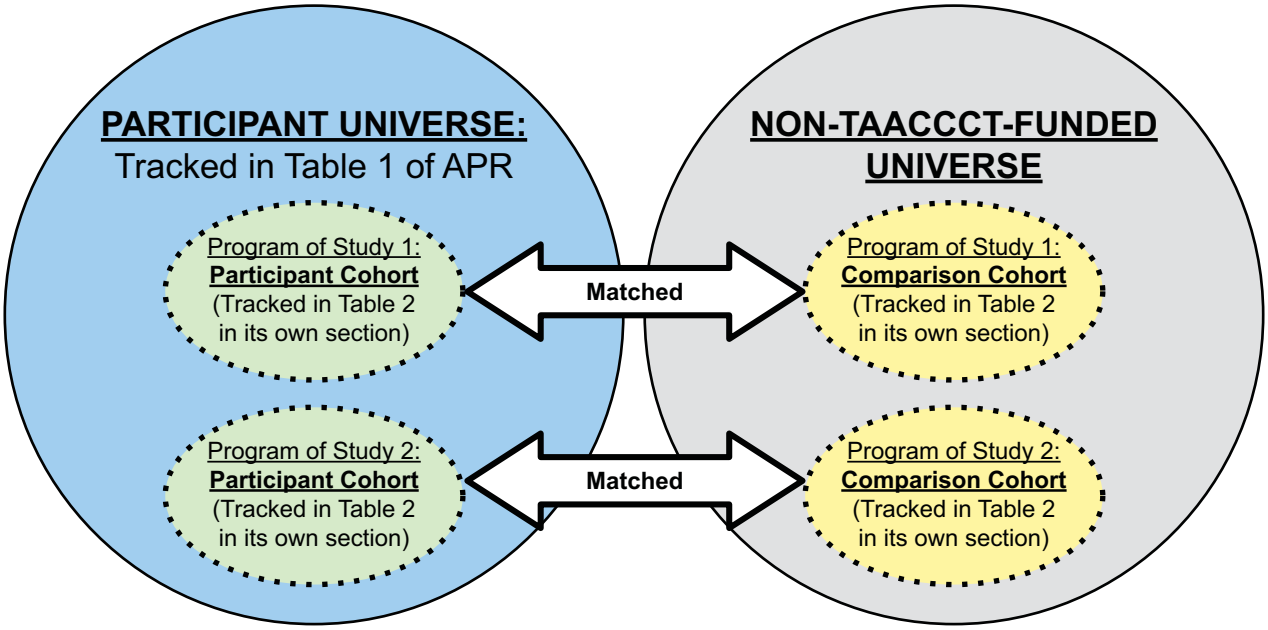
The participants in the participant cohort will be tracked and reported on for the same outcomes from the cohort start date to the end of the period of performance. If this is the case, you may report data in Table 2 of the APR multiple times: once for each program of study.

Many programs may have more than one TAACCCT-funded program of study. The diagram below reflects a TAACCCT-funded program with two programs of study, resulting in two groups of participant and comparison cohorts. In actuality, grantees can have multiple programs of study, so the diagram may look different a bit different for your grant, depending on how many programs are being developed, offered, or improved using grant funds.



For example, Grantee A is planning to build or expand a program in **Nursing** and a program in **Advanced Manufacturing** with grant funds. Therefore, Grantee A should select and report on two distinct participant cohorts, one for each program. Each of these programs will have its own comparison cohort.

Remember, you will separately report on your cohorts for each program of study.

A program of study is broadly defined as an educational program in which a degree or certificate is granted. As a reminder, each program of study funded by the grant should have its own participant cohort on which data are reported separately from your program data as a whole, and separately from the cohort data for other programs of study.

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Grouping programs together

Grouping of some programs with similar educational material or occupational outlook may be appropriate, if it meets some specific requirements which we'll address in the next few slides.

> Example of combining: Grantee B is planning to build or expand a program in Solar Photovoltaic Installation and a program in Wind Turbine Service Technician Training. Under some conditions, participants from each could be combined into one "renewable energy" program of study participant cohort.

Grouping requirements:

First, all of the programs you wish to combine must have been developed, delivered, or improved in whole or in part using grant funds. If you are using grant funds on only one program of study, you will not be able to combine programs.

Second, the programs you wish to combine must have similar education material or occupational outlook. For instance, if you are augmenting both your CNA program and your Pharmacy Tech program, these could be combined into one "program of study" for reporting purposes because graduates of either program may have some coursework in common and graduates from both will enter into the Health Care field.

Third, the programs you wish to combine must begin training at the same time and the participants for the cohort must be drawn from each at the same time. The timelines must match in order to avoid having individuals in your participant cohort who are too different from one another to form a cohesive group for comparison with the comparison cohort.

Finally, you cannot simply choose to combine because it makes reporting easier in some way. There must be a legitimate reason for combining, and usually that will be because, otherwise, you will not have a valid comparison cohort otherwise.

Identifying participant cohorts

Now that we've covered the guidelines for acceptable programs of study, you can start identifying your participant cohort(s). *A participant cohort is a group of students who start the same grant-funded program of study at the same time and will likely be a subset of everyone who enrolls in a program of study, not everyone who enrolls in that individual program of study throughout the duration of the grant.* Think again of the graphic we showed previously, with the yellow circle (the participant cohort) inside the blue circle, which contains all of your participants.

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Even if more students begin the program of study later, they will not be included in the yellow circle. Your participant cohort is selected once and remains the same throughout the remaining grant period. Once in the cohort, a participant is always in the cohort. Each participant in the cohort will be tracked for reporting purposes through the end of the grant period. The end of a course is not the end of the cohort tracking and reporting. This means that you will need to establish procedures to follow-up with students even after they leave the program of study, whether they move on to a different major, drop out of college, or complete the program and get a job.

For best results in terms of reporting, select a participant cohort with a start date as early in the grant as possible, but after capacity building is completed in Year 1 (e.g., the end of Year 1 or start of Year 2). This allows the most time for the participants in your cohort to demonstrate success on the outcomes, and will provide the most useful information against the individuals in comparison group.

Selecting a comparison cohort

Because the comparison cohort is used to compare the differences in outcomes between students who went through a TAACCCT-funded program and students who did not, *it is crucial that your comparison cohort consist only of students that enroll in courses that were not part of programs of study touched with grant funds.*

Further, because you will have a different participant cohort for each program of study, you should be prepared to establish multiple comparison cohorts. Remember that your comparison cohorts should mirror the participant cohorts in terms of several features. Each participant cohort should have its own corresponding comparison cohort. Your number of participant cohorts and your number of comparison cohorts should be the same. For example, if you are developing two new programs of study with grant funds, you should have two participant cohorts and each of those participant cohorts should have its own comparison cohort. Therefore, you would have two participant cohorts and two comparison cohorts.

Like the individuals in the participant cohort, the individuals in your comparison cohort will be tracked and reported on for the same outcomes from the cohort start date to the end of the period of performance. If you plan to use a recent group of students as your comparison cohort, it is important to note that the time period must be equivalent. I will say a lot more about that later in the orientation.

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Requirements for comparison cohort

First, you must have the same number of students in your comparison cohort as in your corresponding participant cohort. For example, if 52 individuals start the program in fall semester of 2012 and comprise your participant cohort, you must have 52 individuals not enrolled in this program in your corresponding comparison cohort.

But you can't have just any 52 students in your comparison cohort. The second requirement is that students in the comparison cohort must be in or from the exact same program of study or combined program of study as your participant cohort students. This does not mean that they must be enrolled in the same courses– remember, students in the comparison cohort can't be enrolled in grant-funded courses. We'll talk about strategies for meeting this requirement a little later.

The third and fourth requirements are that the comparison group students must be similar to the participants with respect *to age and gender, and the anticipated length of the training should be the same for all students in both the participant and the comparison cohorts*. This means they should have the same length of time to complete the programs. For instance, if you develop participant and comparison cohorts for an Associate's Degree in Information Technology, all students should have the same number of hours left to complete the degree.

As with students in the participant cohort, students you select for the comparison cohort will remain in the comparison cohort for the rest of the grant period once that cohort has started training. To "remain in the cohort" means that you are required to track the students and report information on them as in Table 2 in the APR until the grant ends.

Intervention and Comparison Cohort reporting requirement

You must have enough details on individuals in your cohort to be able to report on all outcomes in Table 2 of the APR. The table is divided into multiple sections, and, specifically, you should be able to report all fields in Sections B (Outcomes) and C (Demographics). If one of the priorities your grant is to accelerate progress for low-skilled and other workers, you must also have enough information to report on all fields in Section A, which contains data on basic skills deficiency among students.

The important thing to remember is that this information must not only be cumulative for that same duration of time that the participant cohort has to achieve its outcomes, it must also be reportable on a reporting year-by-year basis. In other words, the information you have for the recent cohort must have been captured in a way (for example, through the collection of dates for all outcomes in Table 2) that allows for reporting the outcomes of the comparison cohort for each reporting year.

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APPENDIX B

INVOLVE STAKEHOLDERS EARLY AND OFTEN: RESOURCES

APPENDIX B.I

CHOOSING AND WORKING WITH AN EVALUATOR

This appendix section presents the PowerPoint slides from the June 28, 2012, webinar presented by Mathematica and CCRC titled "Choosing and Working with an Evaluator." The webinar provided TAACCCT with tools to select, and work with, a third-party evaluator to help meet the measurement and evaluation requirements of the grant. Appendix B.II presents the notes from this webinar.

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CCRC COMMUNITY COLLEGE RESEARCH CENTER
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

MATHEMATICA
Policy Research, Inc.

Choosing & Working With An Evaluator

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Overview

- Writing an Effective RFP
- Negotiating with your Evaluator
- Creating an Effective Partnership

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Guidelines for Preparing a Request for Proposals

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The RFP: Answer basic questions

- ***Who?*** Describe your consortium/program
- ***Why?*** Describe what you want to get from the evaluation
- ***What?*** Describe the scope of work for the evaluation
- ***How?*** Describe terms of contract, proposal requirements, and vendor selection criteria
- ***When?*** List proposal process dates and period of performance

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Who: Overview and Context

- Describe TAACCCT grant program and its goals
- Describe your consortium
- Describe your program/theory of change
  - Inputs
  - Activities
  - Participation
  - Outputs
  - Outcomes

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Why: Statement of Purpose

- What do you want to learn?
  - Implementation study
  - Outcomes study
- Who are the primary audiences?
  - Institutions, systems
  - DOL
  - The broader field
- How will results be used (by the different audiences)?

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What: Scope of Work

- Design:
  - How will they define the comparison cohort?
  - How will they collect, aggregate, and analyze data for implementation/progress/outcome measures?
  - Will they need IRB clearance? How will they get it?
- Activities
  - Key evaluation tasks
  - Key engagement tasks
- Deliverables

➢ ***If you're unsure about specifics, describe what you want the end result to look like***

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How: Terms of Contract

- Roles and responsibilities
  - To whom will the evaluator answer?
  - How will they engage with different stakeholders?
- Budget
  - Know what you can get for the funding you have
  - Don't be coy about how much you have available
- Your procurement procedures

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How: Proposal Requirements & Selection Criteria

- Proposal Requirements
  - Statement of work
  - Vendor qualifications
  - Budget
- Selection criteria
  - How much weight will you give to each section above?
  - Consider trade-offs (e.g., timing/cost/quality)

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When: Timeline

- RFP process timeline
- Period of performance
- Deliverable dates (align with DOL?)
- Activity/engagement dates

➢ ***Gantt charts*** *map activities and deliverables over time – you can develop one or include as a requirement of the proposal*

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RFP Process: A few questions

- How will you distribute your RFP and to whom?
- How will you ensure a good range of applicants?
- Salient procurement policies and legal requirements?

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Overarching Principles

- Be clear
- Avoid jargon
- Describe end result
- Include supporting materials as appendices

➢ *Don't make the vendor guess **what** you want – but rely on their expertise to figure out **how** to deliver on it*

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Clarify your learning goals

"Just tell us if it works"

- **Your role: provide data, clear description of program**
- **Their role: Decide on quantitative evaluation plan; clean & analyze data; provide results**

- Least expensive, but also least informative

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Clarify your learning goals

"Just tell us if it works"

- **Your role: provide data, clear description of program**
- **Their role: Decide on quantitative evaluation plan; clean & analyze data; provide results**

"Help us understand why/how it works"

- **Your role: collaborate on evaluation plan; provide access to staff, faculty, students; review ongoing qualitative & quantitative findings together**
- **Their role: understand implementation variation across sites or areas of study; implementation successes & challenges; faculty and student reactions**

- More expensive, but much more informative

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Clarify your learning goals

"Just tell us if it works"

- Your role: provide data, clear description of program
- Their role: Decide on quantitative evaluation plan; clean & analyze data; provide results

"Help us understand why/how it works"

- Your role: collaborate on evaluation plan; provide access to staff, faculty, students; review ongoing qualitative & quantitative findings together
- Their role: understand implementation variation across sites or areas of study; implementation successes & challenges; faculty and student reactions

"Help us learn how to do this on our own in the future"

- Your role: Active participation in all aspects of planning, qualitative data collection, and qual/quant data analysis
- Their role: A teacher; performing evaluation for its own sake, but also for the larger goal of involving you actively in the process

- Requires more staff time, but most useful in long run
- Different evaluators will have different levels of comfort with / skill in handling these different types of goals

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Explicit conversation about their needs/wants

Common Evaluator NEEDS	Common Evaluator WANTS
• Commitment from top people • Access to key people involved • Project manager returns my calls/emails • Access to necessary data • Enough time to do the job right • Enough money to do the job right • I will not be asked to evaluate people	• Top people make support & commitment clear to those involved • Project manager works closely with me • Access to helpful data • Very clearly-specified mutually-agreed timeline • Task-specific assistance from local personnel

Adapted from Peter Block, "Flawless Consulting"

- Clarify differences between their needs and wants
- Make clear which needs/wants you can meet
- If you're not able to meet needs, the evaluator cannot effectively do the job
- If you're not able to meet wants, evaluation may require more time, more money, or result in less useful evaluation.

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Example: Quantitative data needs vs. wants

Category	Data Element	Priority
Student identifier	Unique student record identifier (NOT student's actual SSN or college id number)	1
	Cohort of entry (term and year)	1
Demographics	Date of birth, or age at entry	1
	Gender	1
	Race/ethnicity	1
	Non-Native English speaker	3
	Geo-code for student home address	3
Educational background	High school diploma or GED, with date of award	2
	College credits transferred from other institutions	2
	Prior postsecondary credentials	2
	Prior enrollment in any adult basic education, GED or ESL courses at college	2
Tested ability	Placement test scores (English, reading, math) and dates	2
	ACT or SAT scores by subject area and date	3

- Priority 1: Needed as soon as possible
- Priority 2: Necessary, but can wait a while before receiving
- Priority 3: Not absolutely necessary, but would be very helpful

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Creating an Effective Partnership

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A good experience

- Consider evaluation from the start
- Openness
- Curiosity
- Communication
- Trust

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A less-good experience

- Mismatch of expectations
- Not allowing process to evolve

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Two key things

- Allow evaluator to get to know leadership, colleges
- Don’t panic – tap your evaluator’s knowledge

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TAA-specific advice

- Identification / documentation / mapping of Program of Study
- Understand data capacity of each college – don't duplicate work

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APPENDIX B.II

SUMMARY NOTES FROM "CHOOSING AND WORKING WITH AN EVALUATOR"

This appendix section presents the notes from the June 28, 2012, webinar on "Choosing and Working with an Evaluator." The webinar provided TAACCCT grantees with tools to select, and work with, a third-party evaluator to help meet the measurement and evaluation requirements of the grant. Appendix B.I contains the slides from this presentation.

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NOTES ON CHOOSING AND WORKING WITH AN EVALUATOR WEBINAR

The webinar on "Choosing and Working with an Evaluator" was designed to provide assistance in writing RFPs to solicit a program evaluator and provide insights into choosing and working with an evaluator. The webinar covered three primary topics: (1) how to write an effective RFP, (2) how to negotiate with a chosen evaluator, and (3) how to build and maintain a productive longer-term relationship with your evaluator. Each topic was structured to present information from the vantage point of an evaluator followed by information from the vantage point of a grantee. The presenters for each topic, along with their background information, are listed in Table 1.

After the presentations, the topic was opened for audience questions to the presenters. The webinar concluded with a general question and answer session.

Table 1. Presenters for Each Topic

Perspective	Presenter	Qualifications
Writing an Effective RFP		
Evaluator Perspective	Ann Person, Senior Researcher, Mathematica Policy Research	Dr. Person is an experienced evaluator and has been on both the writing and receiving ends of multiple evaluation-related RFPs.
Grantee Perspective	Dawn Busick, Project Director, MOHealthWins, Missouri Community College Association	Ms. Busick helped lead the design of an RFP that the MOHealthWins consortium felt had very effective results.
Negotiating with Your Evaluator		
Evaluator Perspective	Shanna Jaggars, Senior Research Associate, Community College Research Center, Teachers College, Columbia University	As a research consultant for nearly a decade before joining CCRC, Dr. Jaggars has a detailed understanding of the critical nature of the negotiation phase to the success of an evaluation partnership.
Grantee Perspective	Chris McRoberts, Executive Director, Path to Accelerated Completion and Employment (PACE), Northwest Arkansas Community College	The PACE consortium has chosen an evaluator and recently completed the negotiation phase.
Creating an Effective Partnership		
Evaluator Perspective	Debra Bragg, Professor of Education Policy, Organization, and Leadership, and Director of the Office of Community College Research and Leadership at the University of Illinois at Urbana-Champaign	Dr. Bragg is an experienced evaluator who is assisting several Round 1 grantees with their TAACCCT program evaluations.
Grantee Perspective	DeRay Cole, Project Manager, the North Carolina Advanced Manufacturing Alliance, Robeson Community College	The consortium has chosen an evaluator with whom they believe they have developed a strong and effective working relationship.

This document presents transcript notes of the verbal content of the presentations and discussions with grantees. The presentations began after a brief introduction from Nan Maxwell, the project's director from Mathematica, and Shanna Jaggars, the webinar organizer from Community College Resource Center.

TOPIC I: WRITING AN EFFECTIVE RFP: GUIDELINES FOR PREPARING A REQUEST FOR PROPOSALS (RFP)

A. The Evaluator's Perspective, Ann Person

I'm going to bring you the perspective of the evaluator on what I want to see in an RFP. Ideally, this will help those who have not selected an evaluator put together an RFP that allows you to get really good proposals and contract for a high quality evaluation.

An RFP needs to answer some basic questions about the work that you want to get done.

1. Who are you? Describe your consortium/program.
2. Why do you want the work? Describe what you want to get from the evaluation.
3. What is it that you want done? Describe the scope of work for the evaluation.
4. How will the vendor get that work done? Describe the terms of contract, proposal requirements, and vendor selection criteria.
5. When will all of this need to happen? List proposal process dates and period of performance.

The more thoroughly the potential evaluator can understand the answers to these basic questions, the better proposal it can put together for you. You need to provide real detail on these questions; however, it's important to balance detail and clarity. That can be difficult. You don't want to dump information on them, but you want to give enough potential information to put together a good proposal.

Be brief and clear in the RFP itself, but provide additional details as appendices. The evaluator will have those things for its reference and be able to get a good grasp of what it is that you're trying to do.

You might want to consider including as appendices: the proposal itself (provided you're able to put those out), any high-level program descriptions you've developed as you're rolling your grant out, an organization chart to show who's who on the grant, and potentially the pertinent materials from DOL (for example, grant solicitations and measurement and evaluations guidelines produced since then).

1. Who are you? Give an overview of background and context on who you are and what you're doing. Don't give this short shrift. Don't give simply boilerplate information. Many of you with your TAACCCT grants are implementing some really complex programs and if you're just putting boilerplate out there, along the lines of what appears in some of the abstracts on the DOL website, it won't tell the potential evaluators that much about your program.

- Describe the TAACCCT grant program and its goals.
- Describe your consortium.
- Describe your program/theory of change.

Give this some serious consideration, even though it is just a background piece, particularly when you describe your program or the theory of change around your program. Include information on inputs, activities, participation, outputs, and outcomes. The process of articulating that theory of change, especially in the start-up phase, might require some serious internal conversations among your team. It will be worth it to put together something that is clear and enables the potential evaluator to know what it is you're trying to do and how you expect it to work. This will enable the evaluator to design an appropriate evaluation.

2. Why do you want the work? This portion answers the following question: Why are you doing what you're doing? This is the statement of purpose. This could be the most important part of your RFP. It will (1) drive the design of the evaluator's proposal and (2) it's the part that you are likely the most prepared to address. It answers the question of what you want to get out of the contract you're issuing:

- What do you want to learn?
  - Implementation study
  - Outcomes study
- Who are the primary audiences?
  - Institutions, systems
  - DOL
  - The broader field
- How will the different audiences use results?

You and your consortia are the ones paying for the evaluation, so you want to privilege your needs, but it's helpful to understand that there are multiple audiences. It helps the evaluator to frame the design and a dissemination strategy if you're looking for that.

3. What is it that you want done? The scope of work is also a very important part of the RFP. Because you all sit on the programmatic side, you might not actually know exactly what you want or need in terms of an evaluation design. Some of the relevant questions that come up from the department of labor include the following:

- How you'll design a comparison cohort
- How you'll collect and aggregate outcomes data
- Whether or not you'll need institutional review board (IRB) clearance and, if so, how will you get it

If you and your team are unable to address these questions specifically, that's OK. What you want to do is describe what you want to get and then rely on the evaluator's expertise to tell you how to get there. With respect to the scope of work, as far as the design goes, just know that you might want to see these things in the proposal and you can put that in as part of the requirements if that is what you want.

With respect to the activities, obviously there's the evaluation task: gathering the data and analysis and reporting of data. I would also encourage you not to forget about the engagement tasks: the extent to which you are going to interact with your team, potentially to help you use your data for continuous quality improvement. There's a lot of room for that the way that DOL structured these grants. If you want the evaluator to be engaged around continuous quality improvement, put that in the RFP.

You'll also want to outline the key deliverables that you expect from the contract. If you're unsure about specifics, describe what you want the end result to look like.

4. How will the vendor get that work done? This will be driven by your institution's procurement rules and requirements. Be upfront and clear about the engagement. To whom is the evaluator ultimately responsible? Who is its point of contact? How will others in your institution engage with evaluator staff beyond that person? The more you can take care of that and identify and facilitate those relationships up front, the more time and resources you'll save on the back end for yourself and the evaluator.

With respect to the budget, don't be coy. Sometimes people are hesitant to put an exact number in the RFP. If you don't put out a ballpark, you're apt to get proposals that are way beyond the scope of what you can actually afford. If that's the case, everyone has just wasted their time. Be as specific as you're comfortable being with the budget that you have available. This helps people to correctly size what they propose to do.

Some of this will be driven by your internal procurement regulations, but what you're going to want to include in the proposal is the following:

- The statement of work
- The vendor qualifications—their curricula vitae and a description of what makes them experts and prepared to do this work
- The vendor's proposed budget

You'll also want to let them know how you're going to weigh these things. You'll want to align your selection criteria to your proposal requirements and consider trade-offs (such as timing/cost/quality).

5. When will all of this need to happen? The time line piece is pretty essential. Make sure you include activity and engagement space in your time line. For example, if you have 15 meetings that you want your evaluator to participate in, you have to make sure the evaluator knows when those are and that evaluator staff would be expected to come. Include the following information:

- RFP process time line
- Period of performance
- Deliverable dates (align with DOL?)
- Activity/engagement dates

I like to put in a plug for Gantt charts. Gantt charts map activities and deliverables over time. I find that for both the vendor and the contracting organization, the Gantt chart can really help to manage the work. It also provides an at-a-glance look of where things are and where they should be over time. You can prepare one of these yourself and include it as part of the RFP or you can ask that the vendor include it as part of its proposal.

RFP process. You have to put your RFP out into the world. Some important things to consider include the following: how you'll distribute it, how you'll target people to receive it, how widely, and how can you ensure that you'll get a good range of applicants. Again, your own procurement procedures are important here and I can't really answer these questions. I only raise them for you to think about.

To sum up, from the perspective of an evaluator, do the following when preparing an RFP:

- Be clear
- Avoid jargon
- Describe what you really want to get out of this contract
- Include supporting materials as appendices; include as much material as you think would be helpful to the vendor to really understand things and how to get there

Don't make the vendor guess *what* you want—you know what you want. What you should do is rely on the evaluator's expertise to figure out *how* to deliver on what you want.

B. The Grantee Perspective, Dawn Busick

When we were awarded our grant, the first thing the grant office did was create a lead *executive advisory committee.* The committee is made up of a mixture of all of our partners. They help guide the grant and work on the overarching administrative and oversight functions that the grant requires: the procurement policies and submitting requests for proposals for the third-party evaluators.

With our grant, we have taken the approach of a rigorous evaluation process that includes employing a *lead researcher* responsible for convening all the consortia colleges. They develop sustainable processes and systems to collect the participant and performance data and to assist the third-party evaluator with evaluating the programs. The lead researcher's role is to have direct management and oversight of the third-party evaluator.

The executive committee is made up of our state agency partners, the public workforce office, our employment security office, and our Missouri Economic Research Center staff. We have several rural and urban community college presidents, vice chancellors, and chief academic officers who serve on this committee. We have one Workforce Investment Board (WIB) director and, eventually when we did obtain an award for our lead researcher, the lead researcher serves on this executive committee.

The executive committee prepared an RFP. We attached our technical proposal, which included our organizational chart, work plan, performance measures, and targeted population definitions. Through every process in developing the RFP, we followed our lead institution's procurement guidelines, which are equal to or more stringent than the DOL guidelines.

We issued an RFP electronically and on our webpage, as well as in three local newspapers. We also sent out invitations to bid for those vendors that had contacted us long before we were ready to issue our RFP. We also tweeted our RFP. We had the RFP out for two weeks. Within our RFP, we included *items that we would assess the bidder on,* based on a point scale.

We assigned 25 points for an introduction (no more than two pages) to describe the business entity and its experience with community colleges, consortium-based research projects, grants, data collection, evaluation, and working with various data collection systems. We awarded 50 points for the actual technical proposal: how the bidder put forth a detailed work plan that included time lines encompassing each service that we listed in our service requirements in the RFP. We also awarded 20 points on the organization and staffing qualifications. We wanted the bidders to describe their staffing levels, the commitment of those staffing levels, and a little bit about their administrative aspects and the qualifications of the members within the proposal.

We assigned 25 points to the budget and, in the budget, we had detailed a few line items: personnel, fringe benefits, travel, equipment, supplies, contractuals, and any other expense categories. Within our RFP, we put our entire amount, which also would include monies to be obligated for a third-party evaluator through the lead researcher management and oversight.

We detailed *seven service requirements* in our RFP:

1. **Development of a technical system for collecting the participant data:** this explained how the various institutions have different databases
2. **Development of a conceptual framework:** determine how the participants will be identified and grouped in cohorts with similar students in the particular cohort's comparison groups
3. **Training users on a data system:** the lead researcher is responsible for educating all the data system users to ensure that all the colleges report data in a consistent and timely manner
4. **Monitoring the data collection, reviewing the data, identifying and addressing the apparent anomalies:** working with system users to ensure that the data were of the highest quality
5. **Identification of measures:** work with the consortium colleges to establish their targets consistent with the progress implementation and outcomes measures that we identified in the technical proposal
6. **The assessment of strategies:** our lead researcher will work with our third-party evaluator to draw conclusions about which strategies most effectively meet or make progress toward our identified goals
7. **The reporting:** the lead researcher is responsible for complying with all the reporting requirements issued by DOL, including the submission of quarterly, annual, and final performance reports

Our RFP was out for two weeks. In the RFP, we also described the format in which we wanted the bid proposals to come. After we received proposals, every member on our lead executive advisory committee received a copy of each submission along with an evaluation tool for scoring. Based on that, the executive committee made its final recommendation to the lead institution (grant recipient) so that the board of trustees could award the final approval of the bid (http://mccatoday.org/mohealthwins/technical-guidance-2/).

C. Question and Answer

How is the evaluator role different from a college's internal data analyst?

Dawn: They're two separate entities. The lead researcher is one entity that works daily 100 percent with each of the consortia college's institutional research staff. Because each of our consortia colleges have different types of databases, the lead researcher's role is to compile all of the data collections and cohesively create one reporting structure that we upload to DOL. The third-party evaluator works with the lead researcher in assessing and evaluating the programs that we're implementing, but not so much as the data collection piece of it.

Ann: Mathematica reviewed all of your proposals, and we saw different grantees handling this in different ways. The way that Dawn mentions is unique (the researcher, the evaluator, and the data lead.) What we saw a bit more often was that everybody has a data lead who's responsible for pulling together the data and aggregating them for reporting purposes, and an external third-party evaluator who's analyzing the data, not just the data for DOL, but any additional data including implementation and progress data that aren't necessarily going to be reported to DOL. That evaluator is basically looking at the program from the outside and assessing how was it put together, what kind of progress it is showing, and if the ultimate outcomes are using as rigorous a design as possible to support inferences about whether it was the program that caused those outcomes.

Is the evaluator the same thing as the third-party reviewer? We do not see an evaluator role other than this position. We have our own internal data compliance manager capturing the data for our reportables.

The third-party reviewer, as we understood, is someone responsible for making sure that any reports that come out of the project, including reporting to DOL, meet certain quality standards. That's a separate function. You could in theory roll that together with an evaluator, but I don't think we saw anyone doing that.

TOPIC II: NEGOTIATING WITH YOUR EVALUATOR: TIPS FOR CHOOSING THE BEST MATCH FOR YOUR NEEDS AND NEGOTIATING THE PROCESS

A. The Evaluator Perspective, Shanna Jaggars

The clearer you can be up front about your needs, your evaluator's needs, and the degree of match between the two of them, the better off you'll be in the long term. It's important for you to understand upfront what **your own learning goal**s are.

When many organizations first hire an evaluator, they just want to know **if the program works;** they don't have time to think about it too much. They just want to report the outcomes that the funder asked for and decide they're done. Evaluators are happy to do this because it's relatively straightforward. Basically you just give them a description of the program and the sites and they decide on the treatment and comparison groups that they think make sense. They do have to negotiate with you to get data on the treatment and comparison groups, but when they have those data, they can churn out the results and be done. This is probably the cheapest option, but it's not the most useful option, for two reasons. First, if your program wasn't set up with a clear treatment and comparison group in mind, or if you're not willing to work with the evaluator to figure out how to deploy the program in different ways to help make a clearer treatment and comparison, the evaluator might just have to make due and come up with its own definitions of the treatment and comparison groups. The evaluator might not be able to come up with two groups that are equivalent at the outset of the treatment. If it is not able to do that, it's harder for the evaluator to draw useful conclusions from the results. Second, even if you do work with the evaluator to create equivalent comparison groups, the evaluator will not be able to make any conclusions about **why** any found effects are happening.

If you want the kind of information that will help you improve the program over time, you're really looking at a different learning goal. You need to say: help us understand **why or how it works or doesn't work.** This can be a stand-alone learning goal if you already know that your program needs improvement, or it can be combined with the first learning goal. The catch is that it requires you to have a stronger partnership with your evaluator. You need to collaborate with the evaluator on the evaluation plan to make sure that the information that comes out of it will actually be of use to you. You need to talk to the evaluator regularly about what it is finding. The evaluator is going to need to have a much stronger understanding of the implementation on the ground and how that varies across sites and subject areas and perceived challenges and successes from a student and faculty point of view. This means that you're going to have to spend time and energy making sure the evaluator has access to all these people and places. The whole thing is more expensive in terms of your staff time and in terms of the evaluator's time and costs, but it can give you clear answers to the questions about what's working and what needs improvement.

The problem is that information is only good for another year or two. If you want to *keep learning and improving continuously over time,* you'll want to learn how to do at least some of these evaluation functions in house. That might be an additional learning goal that requires an even closer and more collaborative relationship with your evaluator. At this point, the evaluator is not there only to execute a task but also teach you how to do that task on your own. Some evaluators love this kind of relationship, but some are not really comfortable with the idea. Some

might be willing to do this kind of close collaboration but they're not necessarily good at it. Before you enter into final negotiations with an evaluator, you must be clear about what kind of learning you as a consortium want to have and make sure that the person is comfortable with that and has some experience doing it.

Explicit Conversation About The Evaluators Needs/Wants

The other thing to consider in the negotiation process is not just your needs, but also, the evaluator's needs. A need is something the evaluator must have in order to do a reasonably good job at the tasks that you specified. A want is something that would enable them to do a better job. Common evaluator needs include the following:

- Commitment from top people
- Access to key people involved
- Project manager returns my calls/emails
- Access to *necessary* data
- Enough time to do the job right
- Enough money to do the job right
- I will not asked to evaluate *people*

Common evaluator wants include the following:

- Top people make support and commitment clear to those involved
- Project manager works closely with me
- Access to *helpful* data
- Very clearly specified and mutually agreed upon time line
- Task-specific assistance from local personnel

When you first talk to an evaluator and it outlines what it will need from you, some things might be wants instead of needs or sometimes the evaluator might have wants but doesn't feel comfortable bringing them up yet. It's important to have an explicit conversation about this and to ask the evaluator what it needs versus what it wants. Make sure the evaluator is very specific about what each thing means.

For example, if the evaluator says that it needs access to key people, don't just say "That won't be a problem." Make sure you both understand who those key people are and then think about how the evaluator will eventually get access to them and if it will or will not be a problem. Then you can make clear which needs and wants you can meet, and which you can't. That will help both parties understand if this relationship is going to work for both of you.

If you can't meet the evaluator's needs, then this person is not going to be able to execute the tasks that you specified in a way in which it feels at all comfortable, and that's going to

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Everything we desired from the evaluator had a cost and I would again emphasize **not being coy with your budget.** I did not include it. It seemed counter intuitive at the time, but in the end it did waste my time. I had to respond to numerous follow-up questions and it probably resulted in some decisions by evaluators not to submit a proposal and the receipt of others who may have been effective but beyond our actual budget.

I responded to some follow-up questions with the $585 per day price cap that the DOL established. Our final selection was able to provide us with a plan B that was actually less expensive. I created a pro/con list for each option. That brought us to our final negotiation on roles and our first steps moving forward. **Our explicit conversations centered on five points,** with the first three being from the evaluator's point of view.

1. The evaluator wanted clarity on how to **integrate him and his team into our management team;** he wanted to have a presence in all aspects of the project moving forward (consortia email, conference calls, and copies of documents/reports). We hope this integrations will help provide him with a richer understanding, especially as he evaluates the "Why" questions.
2. He wanted a **communication plan** that detailed our expectations during the initial phase and onward. This included the reporting schedule specific to each stakeholders, state visits, reoccurring conference calls, and who would be responsible for the minute details (agendas, facilitating the calls, and so on).
3. He wanted c**larity on our data sources.** Are they firmly established and whose responsibility is it to establish initial contact with those sources, memorandums of understanding (MOUs), and contracts? Also, when those are in place, who would be the initiating party for the data request?

   Our department of higher education handles data requests. When we had those first face-to-face meetings, we introduced our evaluator to key contacts at our data agencies and we negotiated the responsibilities for executing the details of the data transaction with the evaluator. From the perspective of the lead institution, our primary goals centered on two things:
4. We wanted the evaluator brought up to speed and to f**ully understand the DOL reporting requirements** and the evaluation reporting resources they had provided to date. We didn't have some of the resources at the time our RFP was released. This was important to us given the somewhat expansive scope of work we had developed for our evaluator. It became apparent that, particularly with the comparison cohort, the evaluator's approach and interpretation of definitions would have been somewhat different from what DOL has established. We also made it clear that we as a management team had to be included and educated on the design because we were the ones that would ultimately be held accountable.
5. We needed the evaluator to provide us with a **detailed order of operations** moving forward. We knew that the data collection and tracking processes were weighing heavily on our consortia members and although issues such as the comparison cohort were important, it was not urgent in the sense of what we needed at this moment at time.

In our initial conversation, the evaluator emphasized that this evaluation would be a dynamic process with which the consortia members really had to be comfortable and understand. I asked that he and his team try to think about the questions that I might not know to ask. To date, it's been a positive experience.

C. Question and Answer

The assumption seems to be that all grantees will hire an evaluator. We plan to do our own evaluation.

Shanna: When you designate an internal evaluator, it's often a much less formal process and there's no contract. Because of that, it might mean that you have to be more specific and explicit about the things covered in the presentation—to know your learning goals and to have explicit conversations with your evaluator about what it wants and needs.

When you already have a relationship with your evaluator, and it feels like it knows what's going on, the evaluator may assume a lot of things that might not actually happen. Have those explicit conversations. Don't feel like your existing relationship is going to solve a lot of things automatically.

Ann: Grace Duvall's point is a good one; several grantees plan to do an internal evaluation. Many of the same principles apply: be clear about your program and the goals of the evaluation.

TOPIC III: CREATING AN EFFECTIVE PARTNERSHIP: CREATING AND MAINTAINING THAT STRONG RELATIONSHIP WITH YOUR EVALUATOR

A. The Evaluator Perspective: An Interview with Debra Bragg

Please give an example of a partnership you felt proud of and what helped to make that a success.

I've worked with a number of college partners doing evaluation and research. I would mention the importance of **thinking about evaluation from the very beginning.** When we think about what those strategies and interventions or models are that we want to implement in a grant, the more we can think about how we're going to assess their effectiveness from the beginning is extremely helpful to evaluators. Those colleges with TAACCCT grants that began to think about evaluation really early set up a relationship in which it was really great to be an evaluator.

Be **open and honest** about what it is you're trying to accomplish, where you are at capacity, and where you might lack capacity. That will become apparent to an evaluator. The more you can be clear about that from the beginning, the more you can move past any pretense and really get in to how you're going to design the evaluation and determine what your critical questions are and what you want to learn.

Ultimately, evaluation is a methodology about learning. What do we know about what we're doing that works, and what doesn't work? The more we can figure those out together, the more we're going to be able to learn. I want to be part of the team and I want to have an environment in which I can really share what I'm learning in an open and honest way. A college partner that is really **curious** is an important piece; the more that an evaluation is conducted because we all want to learn something the more we can begin to get inquisitive. It's exciting to work with a college partner who comes to meetings with questions: "What do we know about our students in the course? What about this?" That curiosity is really important.

The fourth characteristic is **communication.** For an evaluation as complex as the TAACCCT consortium, there's so much information to share, there's so much for everyone to learn. Be open and honest about communication and make sure the evaluator is part of all the communication loops. The more the evaluator understands, the better job it can do.

The fifth characteristic of a successful partnership is for all the parties to appreciate the value and knowledge that the evaluator and others involved bring. Trust your evaluator's expertise; allow it to do its job. Over time those relationships will develop trust, but that doesn't happen immediately; it takes time for people to get to know and trust one another.

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Please give an example of a partnership that didn't go so well and what you learned from these experiences.

One way that things can go wrong is to jump in quickly without taking the time to learn about what each other is trying to do.

Mismatch of expectations. Setting really high expectations without really trying to learn what the other is trying to do. Understanding from the college perspective, what are the strengths and weaknesses of my evaluator? No evaluator is perfect and evaluation is done in many different ways. There can be a mismatch between what the college expects and what the evaluator thinks it should be doing. There has to be a dialogue up front about what it is we need to accomplish and if that's what the evaluator really wants to do as well. That mismatch of perspective and expertise can be a problem.

For example, if an evaluator sees a project as informative, it will likely collect qualitative data to explain why things are happening the way they are or to gain the contextual knowledge. If the college says "We don't need that. We know how to do this" and it wants outcomes, then you have a mismatch between what the evaluator is doing and what the college thinks the evaluator is doing. And that is extremely important.

It's really important to expect that the whole evaluation process will be long. There are almost always things that you don't know or can't anticipate when a project starts. The more both parties can be open to what they're learning, the more beneficial. That can still be really scary though.

It's much easier to have everything outlined, have a clear contract, and have specific roles. That can work too, I'm not suggesting an extreme amount of flexibility, but I have had opportunities in which I could see that we could have done much more if the project had evolved in a particular way. It would have been advantageous to shift or move our questions but because that wasn't the original plan, we lost that opportunity. Every evaluation is different and I think colleges want to work with an evaluator that doesn't just have a cookie cutter approach. I don't think that will work well.

The deeper your evaluator's knowledge of the kinds of programs that you're trying to evaluate, the more helpful it can be. Also, working with someone who can be flexible and who really wants to the best thing for both the program and the college. That's going to make for a much more successful formula.

Please give us some explicit advice to create a strong evaluation partnership.

It's going to be important for the evaluator to **get to know the leadership** of the program (the TAACCCT grant recipient). In a consortium, it's going to be really important for the evaluator to work closely with that leadership. There has to be some time to get to know one another. In any evaluation, that's the case, you have to develop a trusting relationship. When there's a consortium and there's multiple colleges, you really have to get to know all of the organizations, not just the lead. You have to take time to get to know the differences between the various institutions and the student populations.

It's important to trust that your evaluator has the expertise to do the work and use it and its knowledge. The evaluator might introduce certain concepts at times when it thinks that it's important for people to understand. It's important not to go into overload and for colleges to feel as if evaluation is an impossible task. It really shouldn't be that way. There are strategies that allow people to know what they need to at a particular time. It shouldn't be a massive overload of information.

Do you have any TAACCCT-specific advice?

One concept that is extremely important in the TAACCCT grant is **identifying programs of study.** Programs of study are the unit of analysis in which the reporting of student enrollment and outcomes will be necessary. It's very important to have a conversation very soon among the colleges, the consortium, and the evaluator about how they're going to document and map what a program of study looks like, probably in multiple areas. It depends on what the grant is about. There are some resources around programs of study that can help. The office of community college education and leadership has a lot of information on these programs of study. There are many options available.

You have to move quickly to **understand the capacity of the colleges that are part of these grants** to utilize existing data systems and not recreate large and burdensome data requests and data entry. It's going to be important to have the expertise to draw from institutional data systems as well as the unemployment insurance/wage records to build those relationships and start moving on those activities very quickly. It's going to take time to build those systems. The grant is designed that way. There is some pressure to start reporting, but when I've had conversations with DOL, people are very understanding about what it is and the complexity of what we're doing. People just need to start working towards a goal of building out the data systems.

The good thing is many data elements are going to be in the institution's data system. It really helps if you don't have to create massive data collection activities. I'm encouraged by that. It's such an incredible opportunity for the colleges to do really important work and to collect the evaluation data that will help us understand and make strategies that really work.

B. The Grantee Perspective, DeRay Cole

Strengthening the relationship or establishing a long-term working relationship with the evaluator is important. The evaluator should be viewed as **part of the team,** a resource/consultant and he should have involvement in your program and equipment.

The ultimate goals are to fulfill the objectives of your grant, and, if the opportunity arises to get an extension of your grant. For this to happen, you have to have a winning team in place. You need to have an evaluator as part of this team. The evaluator has to be connected from the top down. The evaluator needs the support of the president, the president's direct reports, instructors, the grant writer, and support personnel. You have to make sure the evaluator has access to these individuals.

The grant writer, for example, should have constant or frequent communication with the evaluator because they speak the same language. Also, the evaluator should have access to consultants in consortiums that might be part of the program so that they can understand what their MOUs are. The evaluator should also have an understanding of the scope of responsibility for everyone that's part of the grant team.

The functionality of the evaluator as a member of the grant team should be comprehensive. We have the evaluator attend all of the meetings that we have scheduled, all of our trainings and workings, and any stakeholder meetings. Our evaluator has indicated that this has been one of the most important pieces to him. It makes him feel like he is part of the team and not someone who will come in, do an evaluation, and leave. He is not on our campus; he is at the University of North Carolina, Pembroke.

The next area is viewing the evaluator as a **resource person or a consultant.** We want the evaluator to know that we believe and respect his knowledge base. We expect him to share that knowledge base with us and our industry partners and also to understand what our industry partners and stakeholders require. We encourage our evaluator to go on visits to other consortia members and industry partners with us.

The evaluator needs to be **involved** in the program that's being offered. At the end of the day, this is a person who is going to evaluate the effectiveness of your program. We ensure that our evaluator knows what equipment is being used. We're purchasing advanced manufacturing equipment at the colleges as part of the alliance; therefore it's imperative that our evaluator make frequent visits to these sites. The evaluator has to know the types of credentials your program offers, the curriculum, and what programs lead to those credentials, whether they be certifications, diplomas, or degrees. And they need to be familiar enough with the equipment that as he goes through the evaluation part of his job, he understands all facts of what the grant is about.

Finally, you have to **express confidence in your evaluator;** you have to believe he knows what he's doing. We will work with and support him in the development of the tools and instruments that will be used in the evaluation. If he needs to utilize focus groups, we will assist in identifying and assembling those groups if asked. We will be partners in developing surveys or whatever tools are necessary for evaluation. We want to be part of that. We also want to know the frequency of evaluation. The ultimate purpose is to meet the statement of purpose outlined in the grant. In order to do that, we feel like a long-term relationship is necessary, especially if we want to use the evaluator as a resource in the future.

C. Question and Answer

Grantees did not ask questions specific to this topic.

FINAL QUESTION AND ANSWER

The following was summarized and synthesized across several questions and answers.

1. Is an external (that is, a third-party) evaluator the same as the third-party reviewer? What is the difference in the roles of the evaluator, third-party reviewer, and internal data analyst?

An external evaluator is *not* necessarily the same as the third-party reviewer. An *evaluator* assesses the TAACCCT-funded program's effectiveness, and can be either internal or external to the college. For grantees that hire an external evaluator, their internal data analysts may primarily serve the role of working with the external evaluator on data submissions and refining the research design (however, there are many different models for the relationship between internal college staff and the external evaluator, as the attached PowerPoint discusses). For grantees that do not hire an external evaluator, their internal data analysts can serve as the program evaluators.

The third-party *reviewer* is required, but that person's only role is to review grantees' deliverables to DOL. According to DOL, the role of the TAACCCT third-party reviewer is as follows:

> Successful applicants will be required to identify third-party subject matter experts to conduct reviews of the deliverables produced through the grant. Applicants should allot funds in their budget for the independent review of their deliverables by subject matter experts. Subject matter experts are individuals with demonstrated experience in developing and/or implementing similar deliverables. These experts could include applicants' peers, such as representatives from neighboring education and training providers. The applicant must provide ETA with the results of the review and the qualifications of the reviewer(s) at the time the deliverable is provided to ETA.

If your chosen external evaluator is *also* a subject matter expert (for example, if your evaluator has worked closely with another community college to develop a similar curriculum or program), then your evaluator could conceivably also serve in the role of a third-party subject matter expert. Most evaluators, however, will not have hands-on experience as curriculum or program developers.

2. Are grantees required to have an external evaluator?

No, grantees do not have to hire an external evaluator. However, grantees do need to conduct an evaluation. If you are not hiring an external evaluator, then that evaluation will have to be conducted by someone internal to your organization. Many of the lessons about selecting and working with an external evaluator from the webinar PowerPoint presentation also apply to working with internal staff who are conducting the evaluation. For example, explicit conversations about learning goals and quantitative data needs and wants are important with any evaluator, external or internal.

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3. What exactly is the third-party reviewer required to review? What does the DOL mean by grant deliverable?

We are setting up a meeting with DOL to discuss questions from grantees in an attempt to clarify DOL expectations. We will include this question in our discussion and communicate DOL's response back to grantees.

4. Is there a sample evaluator RFP or question and answer session from a bidders' conference that we could access?

See the "Third-Party Evaluator Request for Proposals," available at http://mccatoday.org/mohealthwins/third-party-evaluator-request-for-proposals/, which provides an external evaluator RFP from MoHealthWINS.

We are not entirely sure what the request for a "question and answer session from a bidders' conference" refers to. For the grantee who asked this question, please feel free to contact your liaison directly to clarify your question, and we will work to find a relevant resource for you.

5. Can you give us details on the upcoming evaluator convening and webinar?

We will provide in-person evaluation technical assistance at a convening scheduled for August 7and 8 in Chicago. We are now finalizing the agenda, based on our recent telephone calls with grantees in which we asked you about your evaluation needs; we expect that key topics will include tracking outcomes over time and constructing appropriate comparison groups. We will send additional information to each consortium project director (including how to book travel) within the next week or so.

The second webinar, tentatively scheduled for September 12, will cover any additional or ongoing evaluation issues for which the large majority of grantees need support after the August 7 and 8 meeting.

GRANTEE QUESTIONS RELATED TO WORKING WITH DOL

We compiled a list of issues for Mathematica to discuss with DOL, with information communicated back to grantees.

- Constructing a compliant comparison group (primary challenge). Grantees have problems identifying or constructing an appropriate comparison group that matches all DOL-named characteristics (for example, program duration, program focus, and so on). Many focused on DOL's requirement of matching on duration. By design, TAACCCT programs have an accelerated time line and thus are of a different duration than previous or existing programs from which many grantees want to construct a comparison group. One grantee also noted that DOL's requirements do not align well with the nature of their programs, but they do not know what to do to meet the criteria. Several grantees were concerned that the challenges of constructing a comparison group were even harder because they were told by DOL that each program requires its own comparison group.
- Constructing a compliant cohort using DOL criteria. Many grantees were concerned with how to appropriately aggregate their students into cohorts that meet DOL's requirements. Grantees with multiple programs across multiple colleges were challenged by DOL's criteria that required them to aggregate and track students as a cohort on DOL outcomes. They do not know how to pool across multiple courses to form the cohorts that DOL wants.
- Receiving guidance from DOL. Some colleges have requested guidance from DOL but have not received it. For example, some colleges have students who move in and out of programs and change their majors. They have asked DOL for guidance on how to deal with and report on these students, but have not received guidance. Another grantee has a noncredit-bearing course in which students must stay in the program as long as it takes them to demonstrate 100 percent competency in all key skills. As a result of this requirement, it is impossible to report on this program (it has no specified duration). The grantee is unsure how to report on this program, and DOL has not provided any help.
- Meeting DOL's reporting time line. There is often a lag between when employment status and wages become available in Unemployment Insurance data, for example, and when DOL expects grantees to report on their study sample. Many grantees are concerned that they cannot get the data they need in time to meet DOL reporting requirements.
- Using DOL's quarterly reporting system. One grantee has not been able to file its most recent report: "The system is constantly down and I'm unable to upload the information that they want. If I knew how much trouble this was, I'd have filed a manual report instead"

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- Developing an efficient way to meet DOL's requirements. Several grantees' programs do not fit easily into DOL's requirements. For example, one grantee has several off-cycle students who receive services but are not counted as part of the current program; thus, enrollment is undercounted. They need to figure out how to count these students and comply with DOL requirements.
- Hosting DOL site visits. One grantee is concerned about site visit on July 9 from DOL. It will be looking at policy compliance, procedures, and effectiveness. How do we communicate to DOL exactly what it needs to see?
- Obtaining needed data. One grantee asked if it might be possible for DOL to create a general request system that TAACCCT grantees could access to obtain the needed data to report on DOL outcomes.
- Tracking students after they leave the program. One grantee noted that it can track students with DOL data immediately after college; however, DOL requirements ask for data for the second period following graduation. The grantee does not know how it will get these data on entered employment rate. Another grantee noted that the employment retention rate variable is impossible to use with its current system. The grantee already mentioned this as a problem during the meeting with DOL, but DOL has not yet addressed this concern.
- Tracking implementation measures. One grantee noted that DOL requires it to report on all implementation measures but it does not know how it will track these data.
- Defining grant deliverable. Colleges are required to have an external subject matter expert review their grant deliverables, but it is not precisely clear what these deliverables should consist of, nor of what the review should consist.

APPENDIX B.III

MEASUREMENT AND EVALUATION PLANNING WORKSHEETS

This appendix section presents worksheets to help develop thinking about planning and implementing a measurement and evaluation system. The worksheets are designed to stimulate thinking about issues that can support successful measurement and evaluation.

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Measurement and Evaluation Planning Worksheets

The worksheet is design to help establish measurement and evaluation needs, to prioritize those needs, and to move the efforts forward. Part A is designed to help you understand how your program is unfolding, for measurement and evaluation is often ineffective unless program components are in place. Part B is designed to stimulate your thinking about issues that can support successful measurement and evaluation efforts and to identify areas of focus. Part C is designed to help prioritize your measurement and evaluation needs.

Guidelines for Completing the Worksheet

PART A: PROGRAM IMPLEMENTATION. Indicate your current phase of implementation, using the following scale:

- NA – Not Applicable: You do not plan to work in this area
- 0 – Not Yet Begun: Work in this area has not yet begun, but will begin later
- 1 – Developing Plans: You are working on this, but have not yet begun to implement
- 2 – Partially Implemented: Some, but not all, pieces are in place and operational
- 3 – Fully Implemented: All pieces are in place and operational

In the notes section for Part A, provide any critical information that will help your team understand progress made toward implementing your program, but do not feel obligated to make extensive comments.

PART B: MEASUREMENT AND EVALUATION. For each of the areas listed in Part B.1, indicate the phase of measurement and evaluation implementation using the same scale as for Part A. For Parts B.2–3, indicate the current phase of measurement and evaluation planning, using the following scale:

NA – Not Applicable: You do not plan to work in this area

- 0 – Not Yet Begun: Work in this area has not yet begun, but will begin later
- 1 – Developing Plans: You are working on this, but plans are still evolving
- 2 – Plans Finalized: Well-developed plans are in place, but activities are not yet underway
- 3 – Plans Operationalized: Well-developed plans are in place and activities are underway

In the notes section, please comment on the following:

- What remains to be done, with what are you still struggling?
- What additional information or resources might you need for implementing in that area?
- Who can you engage for help (within your college/consortium, among TAACCCT grantees, in the field, and so on) for support?
- What are your next steps in this area

PART C: MEASUREMENT AND EVALUATION. Brainstorm with your team about the most efficient ways to proceed and record your answers.

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PART A: PROGRAM IMPLEMENTATION

A.1. CURRENT STATUS OF IMPLEMENTING YOUR PROGRAM

Staff in Place (project management, faculty, support staff, data lead, and so on)

NA	Not Yet Begun 0	Developing Plans 1	Partially Implemented 2	Fully Implemented 3

Notes:

Memoranda of understanding (MOUs) with all necessary *program* partners in place. For example, colleges, employer partners, and community-based organizations (CBOs). Note that measurement and evaluation partners are addressed in A.2.

NA	Not Yet Begun 0	Developing Plans 1	Partially Implemented 2	Fully Implemented 3

Notes:

Curricular materials in place

NA	Not Yet Begun 0	Developing Plans 1	Partially Implemented 2	Fully Implemented 3

Notes:

Technology Platforms/Tools in Place

NA	Not Yet Begun 0	Developing Plans 1	Partially Implemented 2	Fully Implemented 3

Notes:

Recruitment/Enrollment Processes in Place

NA	Not Yet Begun 0	Developing Plans 1	Partially Implemented 2	Fully Implemented 3

Notes:

A.2. OTHER ISSUES:
Please use this space to note any additional issues that will help you understand the implementation status of your program.

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PART B: MEASUREMENT AND EVALUATION

B.1. CURRENT STATUS OF OPERATIONAL ISSUES FOR PROGRAM EVALUATION

Institutional Review Board (IRB) Approval Has Been Obtained

NA	Not Yet Begun 0	Developing Plans 1	Partially Implemented 2	Fully Implemented 3

Notes:

MOUs/contracts with all necessary measurement and evaluation partners (for example, labor agencies, college institutional research [IR] offices, external reviewer, external evaluator) in place

NA	Not Yet Begun 0	Developing Plans 1	Partially Implemented 2	Fully Implemented 3

Notes:

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PART B: MEASUREMENT AND EVALUATION (continued)

B.2. PLANNING FOR MEASUREMENT AND EVALUATION OF PARTICIPANT AND COMPARISON GROUP OUTCOMES

- **Plan for identifying which participants will be included in the evaluation (that is, definition of the participant cohort or cohorts)**

NA	Not Yet Begun 0	Developing Plans 1	Plans Finalized 2	Plans Operationalized 3

Remaining items/challenges:

Additional information/resources needed:

Who to engage:

Next steps:

- **Plan for identifying students who are not receiving program services to comprise a comparison group in the evaluation (that is, definition of the comparison cohort or cohorts)**

NA	Not Yet Begun 0	Developing Plans 1	Plans Finalized 2	Plans Operationalized 3

Remaining items/challenges:

Additional information/resources needed:

Who to engage:

Next steps:

- **Plan for participant and comparison group outcome data collection**

NA	Not Yet Begun 0	Developing Plans 1	Plans Finalized 2	Plans Operationalized 3

Remaining items/challenges:

Additional information/resources needed:

Who to engage:

Next steps:

- **Plan for participant and comparison group outcome data analysis and reporting**

NA	Not Yet Begun 0	Developing Plans 1	Plans Finalized 2	Plans Operationalized 3

Remaining items/challenges:

Additional information/resources needed:

Who to engage:

Next steps:

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PART B: MEASUREMENT AND EVALUATION (continued)

B.3. PLANNING FOR MEASUREMENT AND EVALUATION OF PROGRAM IMPLEMENTATION AND PROGRESS

- **Plan to collect and report data on *program implementation* (that is, information about the development of program content, as well as procedures and processes; for example, adoption of new curricula or assessments, establishment and functioning of employer partnerships, and execution of articulation agreements)**

NA	Not Yet Begun 0	Developing Plans 1	Plans Finalized 2	Plans Operationalized 3

Remaining items/challenges:

Additional information/resources needed:

Who to engage:

Next steps:

- **Plan to collect and report data on *program progress* (that is, early indicators of successful program implementation—uptake of or participation in grant-funded programs, use of technological tools by faculty/staff or students, and so on)**

NA	Not Yet Begun 0	Developing Plans 1	Plans Finalized 2	Plans Operationalized 3

Remaining items/challenges:

Additional information/resources needed:

Who to engage:

Next steps:

OTHER ISSUES:
Please use this space to note any additional issues that will build an understand your plans for measurement and evaluation of your TAACCCCT-funded program.

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PART C:MOVING MEASUREMENT AND EVALUATION FORWARD	
What major measurement and evaluation challenges remain?	
How will you address these challenges and what is the time frame?	
What do you think would be the best way to address each need (for example, group work, work with content expert, or work with IR or evaluator)?	
Who should be involved in working with an evaluation team?	
What is the best way to get started on critical issues (for example, individual meetings with targeted individuals, group meetings, or workshops)?	
Other issues	

APPENDIX B.IV

USING WAGE RECORDS FOR TAACCCT REPORTING AND EVALUATION

This appendix section presents the PowerPoint slides for a presentation to help TAACCCT grantees understand the purpose of TAACCCT reporting performance measures. The slides review basic TAACCCT reporting requirements and discuss additional measures grantees can use to determine the impact of a TAACCCT-funded intervention and the limitations of those measures. The presentation was given at a TAACCCT Evaluation & Measurement Convening on August 7 and 8, 2012. The convening was sponsored by BMGF and hosted by Mathematica and CCRC.

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Using Wage Records for TAACCCT Reporting and Evaluation

MATHEMATICA
Policy Research

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TOPICS

- TAACCCT Reporting Requirements
- Rigorous Evaluations
- Data Use Agreements
- Wage Record Limitations
- Summary

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TAACCCT Reporting Requirements

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TAACCCT Reporting Requirements

- **Annual reporting is required for:**
  - **All TAACCCT participants**
  - **Students who are part of a comparison cohort**
- **Three employment related performance measures are required as part of the annual reporting process**
  - **Entered Employment Rate**
  - **Retention Rate**
  - **Average Earnings**
- **These are "common measures" which are used to assess performance of workforce development programs.**
- **They can be calculated using wage records maintained by state workforce agencies (SWAs).**

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TAACCCT Reporting Requirements

- As part of the TAACCCT proposal applicants were asked to describe their approach to tracking employment, retention, and earnings outcomes.
- Applicants were encouraged to establish data sharing agreements to obtain access administrative records containing this information.
- Where applicants did not have an existing relationship with its SWA, it was to describe the process it would use to obtain employment outcome information.

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TAACCCT Reporting Requirements

- **Using wage records for performance measurement is not without precedent**
  - **The most common use of wage data is to calculate measures of program performance, next to determining eligibility for unemployment compensation**
- **Not all programs that use wage data to assess performance access UI wage date directly**

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TAACCCT Reporting Requirements

- **With SWA concurrance, grantees can comply with TAACCCT reporting requirements without directly accessing individual wage records.**
  - **Grantees could provide the SWA a list of SSNs for whom common performance measures are needed.**
  - **The SWA would calculate the performance measures and provide those to the grantee without divulging personally identifiable information (PI).**

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Rigorous Evaluations

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Rigorous Evaluations

- **Reporting the common measures is necessary to comply with the requirements of the TAACCCT grant.**
- **More than performance measures are needed to determine if a TAACCCT-funded intervention has a significant impact.**
  - **Could differences be accounted for by chance?**
  - **Are factors other than the intervention responsible for observed differences?**

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Rigorous Evaluations

- More sophisticated modeling and analytic approaches are required to address these questions.
- These require access to individual wage records.
- Obtaining access to personally identifiable data raises obvious privacy concerns.

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Data Use Agreements

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Data Use Agreements

- Some form of Data Use Agreement (DUA) will be needed between TAACCCT grantees and the SWA.
- Federal regulations prohibit the disclosure of wage records except as provided by law.
  - Federal law permits the release of wage records for research related to federal, state, or local program performance (20 CFR 603.5).
  - Such use is permissible only if authorized by state law.
- In the case of multi-state consortia, separate DUAs will be required for each SWA.

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Data Use Agreements

- Establish the rationale or justification for access.
- Describe the information required.
- Indicate record retention policy.
- Review security procedures.
- If necessary, specify financial reimbursements to the SWA.
- Ensure that the DUA does not contravene any FERPA policies and procedures.

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Wage Record Limitations

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Wage Record Limitations

- **Wage records not available for all workers. For example:**
  - **Independent contractors**
  - **Some agricultural employment**
  - **Out-of-state employment***
  - **Federal employment***
  - **Military employment***
  - **Self-employed**
  - *** Depending upon the state, SWAs may have access to wage records for some of the excluded categories**
- **Availability of wage records is often time constrained.**
  - **Information for covered employers on a quarterly basis.**
  - **Program performance cannot be computed until six months after program exit because of lags**

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Summary

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Summary

- Data from wage records is needed to comply with TAACCCT reporting requirements. However access to personal wage records is not necessary.
- To better understand the real impact of TAACCCT funded programs access to wage records is needed.
- Data use agreements need to be in place and the ability to obtain them is going to vary by state.
- To address holes in the data it may be necessary to administer supplemental surveys.
- Utilize this convening to learn from the experience of other TAACCCT grantees.

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Additional Information

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Basic Wage Record Information

- Employee's full name and social security number.
- Address, including zip code.
- Birth date, if younger than 19.
- Sex and occupation.
- Time and day of week when employee's workweek begins.
- Hours worked each day.
- Total hours worked each workweek.
- Basis on which employee's wages are paid (e.g., "$9 per hour", "$440 a week", "piecework")
- Regular hourly pay rate.
- Total daily or weekly straight-time earnings.
- Total overtime earnings for the workweek.
- All additions to or deductions from the employee's wages.
- Total wages paid each pay period.
- Date of payment and the pay period covered by the payment.

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Directory of SWAs

- http://us.jobs/state-workforce-agencies.asp

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APPENDIX C

DEVELOP A SHARED LOGIC MODEL: RESOURCES

APPENDIX C.I

CREATING AND APPLYING LOGIC MODELS IN YOUR TAACCCT EVALUATION

This appendix section presents the PowerPoint slides from a webinar on developing and using logic models that can guide the evaluation of TAACCCT programs. The webinar, titled "Creating and Applying Logic Models in Your TAACCCT Evaluation," was held on October 3, 2012, and hosted by Mathematica and CCRC. Appendix C.II presents the notes from this webinar.

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CCRC COMMUNITY COLLEGE RESEARCH CENTER
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

MATHEMATICA
Policy Research, Inc.

Creating & Applying Logic Models in Your TAACCCT Evaluation

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Overview

- Developing Logic Models to Support Measurement & Evaluation Planning
  - Mathematica Policy Research
- H2P Consortium Evaluation: Logic Models and More
  - Office of CC Research & Leadership (U. Illinois)

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Developing Logic Models to Support Measurement and Evaluation Planning

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Presentation Overview

- Logic Model Definition
- Using a Logic Model for Measurement and Evaluation
- Steps to Developing a Logic Model for Measurement and Evaluation
- Continued Uses for Logic Models
- References

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Logic Model Definitions

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What Is a Logic Model?

- *A visual representation of a program's goals and objectives and the program components that link them (Card et al. 2007)*
- *A systematic and visual way to present and share your understanding of the relationships among the resources you have . . . the activities you plan, and the results you hope to achieve (Kellogg Foundation 2004)*

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If → Then Relationships

Logic models are connected by a series of "if → then" relationships

- If resources are available for your program, then program activities can be implemented
- If program activities are implemented as planned, then certain outputs will be realized
- If outputs are produced, then key outcomes will result

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The Basic Logic Model

Inputs →	Activities →	Outputs →	Outcomes →	Impacts
3	4	5	1	2
Your Planned Work		Your Intended Results		

Adapted from Kellogg Foundation (2004).

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Using a Logic Model for Measurement and Evaluation

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What Does a Logic Model Do?

- Provides stakeholders with a road map that connects the need for the program to the desired results/outcomes
- Builds common understanding of your program, especially the relationships among inputs, activities, and results (if → then)
- Helps visualize how key inputs can contribute to achieving desired outcomes
- Forms a basis for identifying measurement and evaluation that will support tracking your program, developing tools for improving your program, and reporting

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How Can I Use My Logic Model for Measurement and Evaluation?

Measurement and evaluation helps you document and understand

- What you did—your activities and services
- How you did it—your implementation strategies and activities
- What you achieved—your results and outcomes

For measurement and evaluation, your logic model

- Identifies your program components that can be reliably and feasibly measured and evaluated
- Helps define what is important to measure and when
- Presents how you can monitor progress toward goals
- Helps develop measurement and evaluation questions

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Steps to Developing a Logic Model for Measurement and Evaluation

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How Do I Develop a Logic Model to Use for Measurement and Evaluation?

Step 1: Describe your desired results, outcomes, and impacts

Step 2: Identify your resources or inputs

Step 3: Describe your program activities/services

Step 4: Determine your planned program outputs

Step 5: Link it all together

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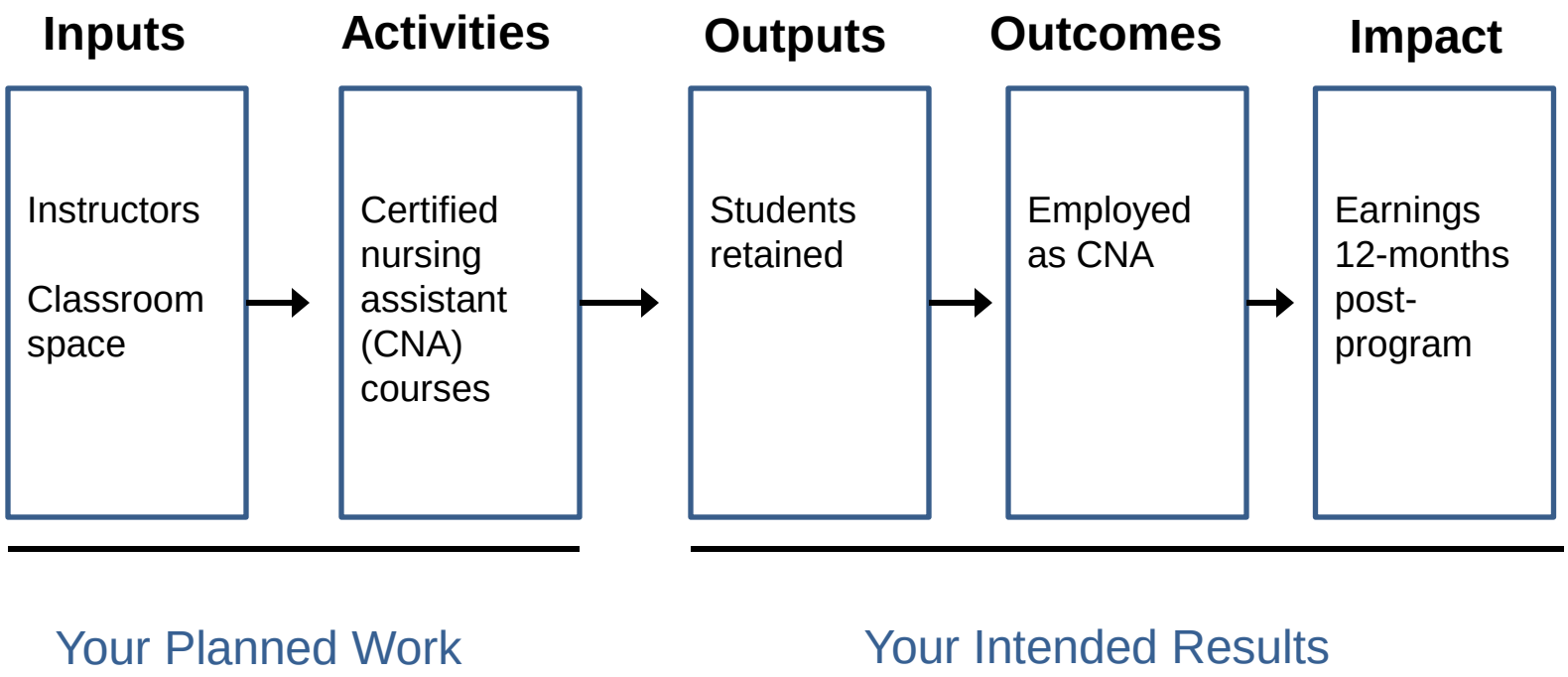
Example of a Logic Model



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Step 1: Describe Results, Outcomes, Impacts

What is it that you hope your program will change or achieve among your target population?

Outcomes = the changes that occur or the difference that is made for individuals (or other target group) during or after the program

Defining desired outcomes first will help you . . .

- Streamline resource use to support program activities and maximize the likelihood of positive outcomes
- Develop activities and services focused on achieving outcomes
- Work backward from long-term impacts to short-term outcomes and intermediate objectives that support them

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Sample Results, Outcomes Impacts

- Long-term impacts focus on primary long-term changes in status or behavior, such as gaining employment in targeted fields, maintaining employment, or increasing income
- Intermediate outcomes focus on key behaviors and skills that the program seeks to support, such as program or credential completion, skills development, or entering a job
- Short-term outcomes focus on immediate changes in knowledge, attitudes, intentions, behaviors, and skills, such as program retention, course completion, or intention to find a job

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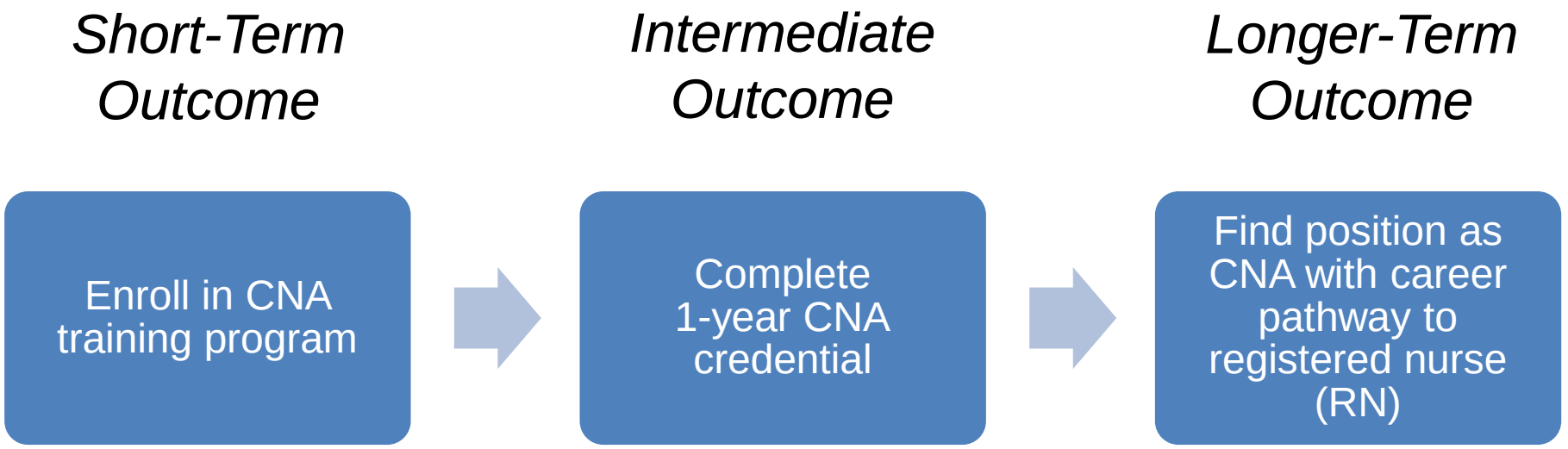
Sample Time Line of Outcomes



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Step 2: Identify Your Resources or Inputs

Common Resource Types

- **Human resources:** staff, specialized instructors, consultants, volunteers, collaborating partners, networks
- **Financial resources:** operating budget, grants, donations, other monetary resources
- **Space**: offices, classrooms, specialized rooms, other facilities
- **Technology:** computers, smart boards, software, communications (email, website, intranet, social media)
- **Materials and equipment:** office machines, equipment specific to skills-building activities, office supplies, program materials, training materials, insurance
- **Relationships**: potential employers, data sources, memorandums of understanding (MOUs)

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Step 3: Describe Your Program Activities

What will your program do with its resources to bring about your desired change or results?

- **Develop products:** curricula, program manuals or texts, promotional materials
- **Provide services:** screening and diagnostics, education, training, skills-building, counseling, workshops, referrals
- **Build infrastructure/partnerships:** developing new and strengthening existing partnerships with employers, institutional management structures, consortia relationships, organizational capacities

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Step 4: Determine Your Planned Outputs

- Outputs = measureable, tangible, and direct products of your program activities
- Outputs ≠ the changes you expect your program to achieve (these are your outcomes or impacts)

Examples

- No. of informational sessions held/participants attending
- No. of potential students screened and enrolled
- No. of employer partnerships formed
- No. and types of curricula developed
- New facilities opened
- No. of course units provided/completed
- No. of students retained and/or completing the program

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Step 5: Link It All Together

Make sure your logic model is SMART

- Specific
- Measureable
- Action-oriented
- Realistic
- Timed

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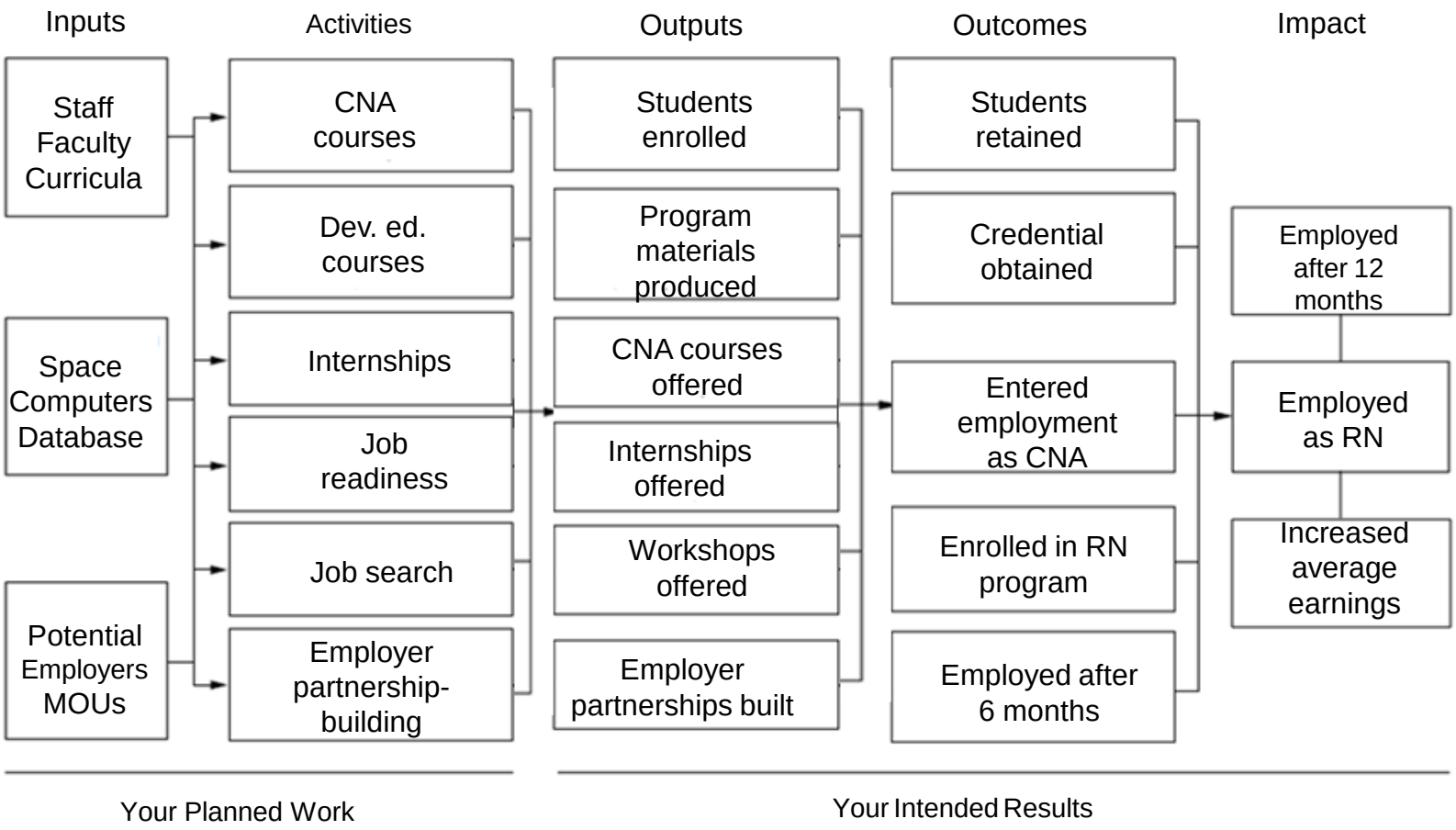
Example of a Logic Model



Adapted from Kellogg Foundation (2004).

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Continued Uses for Logic Models

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How Can I Continue to Use My Logic Model?

Now that you have created a logic model, you can put it to work to

- Build understanding and promote buy-in among stakeholders about what your program is, how it works, and what it is trying to achieve
- Communicate at a glance what your program is doing (activities) and what it is achieving (outcomes)
- Explain to funders your accomplishments, where they came from, and what is needed to maintain and extend them
- Tell your story to potential clients, donors, policymakers, and media
- Measure and Evaluate your accomplishments—locate activities, outputs, and outcomes that can be reliably and feasibly measured

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References and Additional Resources

- Anderson, Andrea. *The Community Builder's Approach to Theory of Change*. New York: The Aspen Institute Roundtable on Community Change, 2005.
- Card, J.J., Jacqueline Berman, and Julie Solomon. *Building Culturally Competent HIV Prevention Programs.* Cambridge, MA: Springer Publications, 2007.
- Horsch, Karen. "Using Logic Models for Program Planning and Evaluation." Place-Based Education Evaluation Collaborative, 2008.
- Innovation Network. *Logic Model Workbook*. Washington DC: Innovation Network, 2010.
- Kellogg Foundation. *Logic Model Development Guide*. Battle Creek, MI: Kellogg Foundation, 2004.
- Medical Reserve Corps. "Training Guide #2: Logic Models." Rockville, MD: Medical Reserve Corps, ND.
- Renger, Ralph, and Allison Titcomb. "A Three-Step Approach to Teaching Logic Models." *American Journal of Evaluation,* vol. 23, no. 4, 2002, pp. 493–503.

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H2P Consortium Evaluation: Logic Models and More

Office of Community College Research and Leadership
University of Illinois at Urbana-Champaign

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DRAFT -- H2P Logic Model -- DRAFT

Input Sources

H2P Nat'l Adv Bd
Health Prof Network (HPN)
NCRC
ISeek
Nat'l Assoc of Wkfc Bds
TIES
OCCRL (Univ of IL)
H2P Community of Practice Partners

Local Coalition partners
- WIB
- CBO
- Employer(s)
- One Stops
- Etc.

H2P Strategies

__Develop online approaches to prior learning assessments (PLA) using VCN

__Integrate health career content into dev. ed. courses

__Develop competency-based core curriculum

__Create at least one new HP credential at each H2P college

__Establish intrusive advising with college completion advisors and use of technology

__Establish structured process to create and sustain incumbent worker training model

__Enhance data and accountability systems

__Contribute toward a consortium generated national movement toward common core curriculum for health professions and potential nat'l certification

Outputs

- Online content for PLAs
- Compendium of syllabi for health professions contextualized dev. education
- Compendium of syllabi for core curricula in health professions
- Report on the ROI for incumbent health worker training programs
- Consensus report on developing core curricula in the health professions
- Guide for accessing and using local LMI to plan and improve HP training
- Toolkit with case studies and other resources for postsec. Ed. and workforce dev. Communities
- Convening to examine best ways to access and use LMI to build and enhance HP programs

Outcomes (partial list)

- # of H2P colleges with resources for prior learning assessments
- #H2P colleges with resources for online assmts of found skills
- # syllabi for new dev ed courses that integrated health content
- #H2P colleges with evidence of inst. approval for at least 1 dev ed course context to HC
- #H2P colleges with evidence of institutionalization of comp.-based core curriculum
- # HP programs at H2P colleges that use at least 1 course in new core curriculum
- # local employers that develop and approve new credentials dev by H2P colleges
- #CP programs through which a student eligible to earn credential
- # low skilled workers/stud contacted by college completion advisor at each H2P college
- # H2P college that sends 10> JR text msgs to HP students
- #students who respond to JR msg at each college

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H2P Progress and Implementation Planning Guide

Site: Insert Site Name

Sections:

1. Students - TAA-eligible, Displaced workers, Low-skilled adults, Other Beneficiaries
2. Strategy 1: Online assessment and career guidance – Prior Learning Assessment (PLA)
    a. Consortium and College targets
    b. Plans
    c. Technical Assistance
3. Strategy 2: Contextualized developmental education
4. Strategy 3: Competency-based curriculum
5. Strategy 4: Industry recognized stackable credentials
6. Strategy 5: Enhanced retention support
7. Strategy 6: Incumbent worker training
8. Strategy 7: Enhanced data and accountability systems

Other: Partnerships

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Timeline for Major Activities on Progress and Implementation Evaluation:

Major Activity	TAACCCT Year 1				TAACCCT Year 2					TAACCCT Year 3				
	Q1-12	Q2-12	Q3-12	Annual Report 2012	Q4-12	Q1-13	Q2-13	Q3-13	Annual Report 2013	Q4-13	Q1-14	Q2-14	Q3-14	End of Grant 2014
1. Development and initial implementation of H2P Common Data System	X	X	X											
2. Formation of the H2P Data Quality Team (and regular monthly communication)	X	X	X		X	X	X	X		X	X	X	X	
3. Ensure compliance with human subjects, non-discrimination, etc.	X	X												
4. Negotiate data sharing arrangements/agreements, as needed		X	X											
5. Build a data dictionary		X	X											
6. H2P Data Quality meeting (Chicago, IL)		X												

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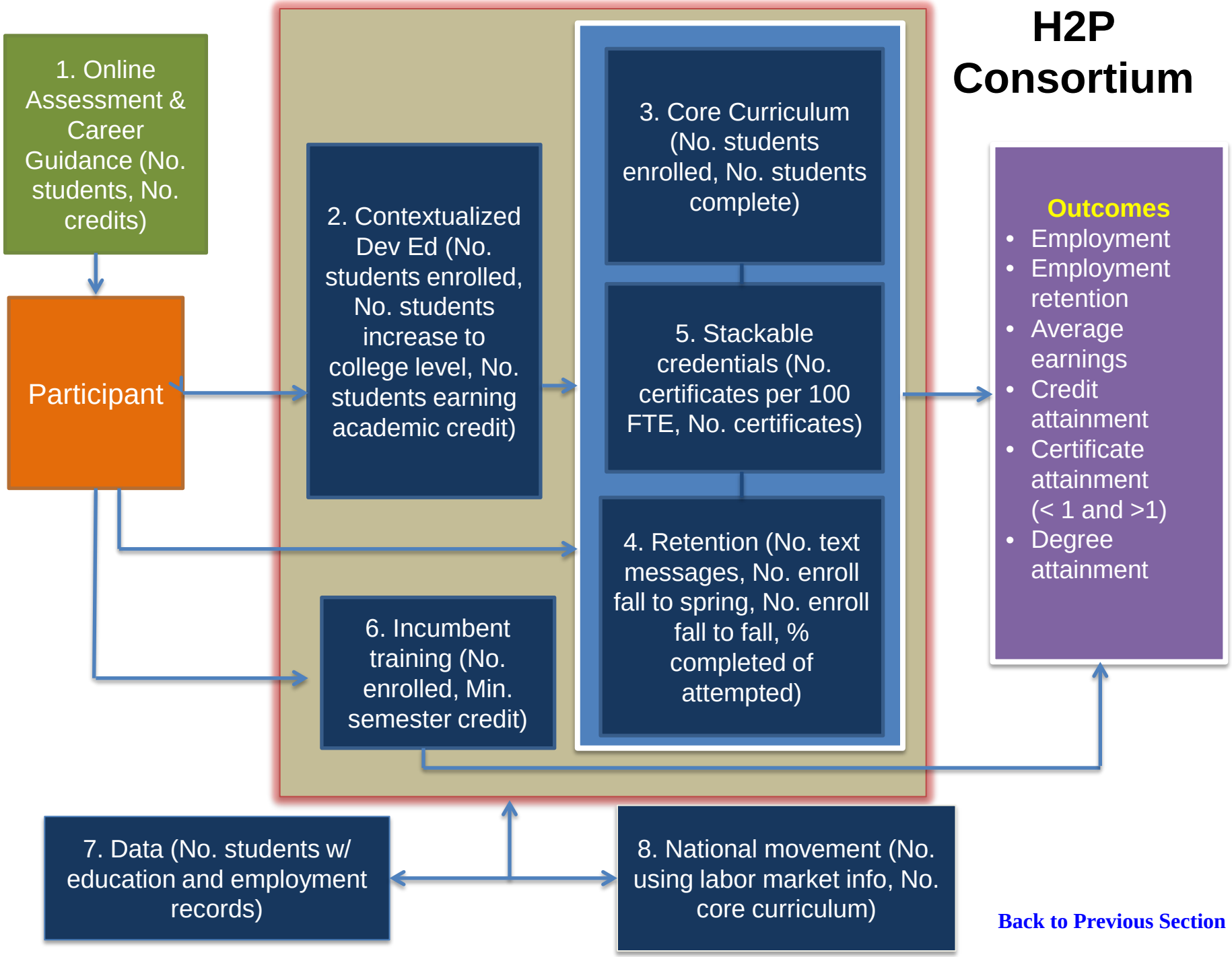
H2P Consortium



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APPENDIX C.II

SUMMARY NOTES FROM "CREATING AND APPLYING LOGIC MODELS IN YOUR TAACCCT EVALUATION"

This appendix section presents the notes from the October 3, 2012, webinar on "Creating and Applying Logic Models in Your TAACCCT Evaluation." The webinar was designed to provide information on developing and using logic models that can guide the evaluation of TAACCCT programs. Appendix C.I contains the slides from this presentation.

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NOTES ON CREATING AND APPLYING LOGIC MODELS IN YOUR TAACCCT EVALUATION

The webinar on "Creating and Applying Logic Models in Your TAACCCT Evaluation" was designed to introduce participants to the concept of logic modeling, which can be used to meet TAACCCT measurement and evaluation requirements and help grantees understand the connections within and across program strategies, leading to higher quality program implementation and outcomes. The timing was designed to support current measurement and evaluation activities, while connecting grantees back to the broader issues of long-term evaluation and improvement.

The first presentation in the webinar provided a relatively high-level view of logic models and aimed to provide grantees with logic model basics that grantees can apply to current and future activities. The second presentation provided a more hands-on look at the application of logic models to data collection activities. After the presentations, the topic was opened for audience questions to the presenters.

Presentation I: Jacqueline Berman, Senior Researcher, Mathematica Policy Research

The purpose of this presentation is to introduce or refresh your memory on what a logic model is, what its purposes and uses are, and in particular how to develop one that will support your measurement and evaluation activities related to your TAACCT program. Even if you're not involved with evaluation (if you have an external evaluator), you'll have measurement factors (your performance measures). Our purpose is to think about how we can use a logic model to support that. In particular, we will show you how a logic model can show you how the different components of your program fit together and how you can use the information about that fit and those linkages for measurement and evaluation.

One thing we want to emphasize is that you're reporting quarterly on your strategies and process measures and you're reporting annually on your outcomes measures and we want to help you connect the progress measures and outcome measures. If they get disconnected, you can really lose the potential to track and understand your program, how your program is going, and how to use that information to improve your program.

Your logic model is designed to help you see how your program components fit together and thus how your strategies are linked. When that is clear, it's a little easier to understand how your measures are linked to the program; how you might collect the data you need for reporting, and how you might use this to track and improve your program.

Logic Model Definition

What is a logic model?

At the most basic level, you want to view your logic model as a picture of how your program is going to work. A logic model uses both words and pictures to describe the sequence of activities that you think will create change. What's going to make the difference for your students? What are you doing and how are you doing it that will end up with the results that you want to achieve?

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It is the components depicted in these words and pictures that you're going to measure for your reporting. You can think of a logic model as a series of if/then relationships and they're connected through this if/then. In particular, you would say, "IF you have certain resources, THEN you can do these particular activities. IF you do these activities, THEN you'll be able to produce certain outputs. IF you have these outputs, THEN you're going to get the results you want."

For example, *if* you have your faculty, staff, and space, *then* you can offer your planned steel building course. Or, *if* you offer two semesters of course work, *then* you can expect 100 students will complete your certificate program.

The logic model helps you see where those if/then relationships are. It helps if you can't make those connections between those components of your program, then the logic model will help you identify the gaps and adjust your work.

The Basic Logic Model

There are five primary components of a logic model: inputs (3), activities (4), outputs (5), outcomes (1), and impacts (2). You'll notice the numbers are out of order. The reason that outcomes and impacts are numbered one and two is that, when developing your logic model, it's a good idea to start with where you hope to end up; your goals (outcomes) and objectives (impacts).

You want to start with what you hope to achieve in the short term and in the longer term; then you can work backward to identify your inputs and move left to right.

There is no one right way to develop a logic model—that's just one strategy. It depends on what is most clear to you and what parts you need or want to flesh out with your other program stakeholders.

What does a logic model do?

Simply put, a logic model demonstrates *how* and *why* a program solves a particular problem and makes the most of valuable assets you're devoting to it; a logic model helps you see what these assets are, how you want to use them, and why you want to use them to get to a particular result.

Provides stakeholders with a road map that connects the need for the program to the desired results/outcomes. A logic model provides stakeholders with a road map describing the sequence or related events connecting the need for the planned program with the program's desired results.

Builds common understanding of your program, especially the relationships among inputs, activities, and results (if → then)

Helps visualize how key inputs can contribute to achieving desired outcomes. A logic model helps visualize and explain how human and financial investments can contribute to achieving your intended outcomes and can support program improvement.

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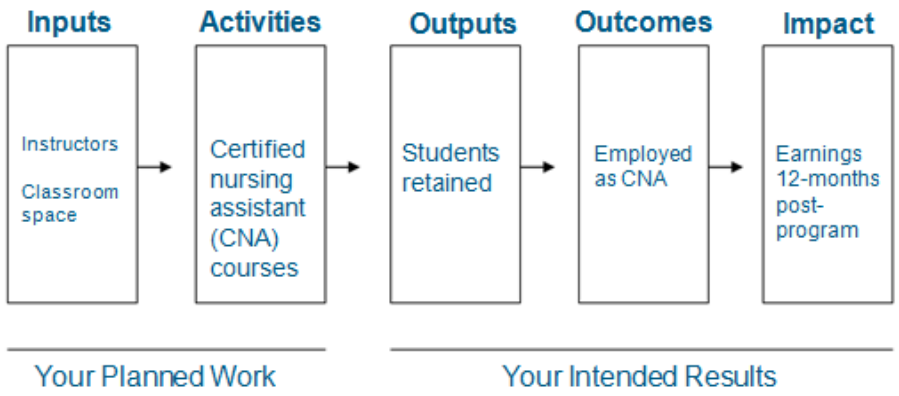
Forms a basis for identifying measurement and evaluation that will support tracking your program, developing tools for improving your program, and reporting. The logic model can form a basis for your evaluation and measurement activities. It does this by helping you identify what resources you have on hand, what activities and service you plan to provide; what you plan to achieve when you've provided your services (outputs), and what changes you hope to make after you produce those outputs (outcomes and impacts.)

For measurement purposes, when you have a clear sense of each of these components for your program, then it's easier to identify what is it that you want to measure and report on. Then you can discuss where it is feasible for you to collect data, what data you think you can reliably collect, and to think about how to develop tools for data collection and reporting. After you've met your reporting needs, then you can think about how you want to use these data to support and improve your program.

Think about the logic model in terms of measurement and evaluation—a logic model is a fundamental first step for program measurement and evaluation. You don't have to do it, but it's a tool for support. The logic model helps you track and understand what you're doing, how you're doing it, and what you're seeking to achieve. When you look at your program's components in this way, it can help you decide what you want to measure and when you want to measure it.

It can also help you think about needs you might have to measure the aspects of your program reliably and feasibly.

Steps to Developing a Logic Model for Measurement and Evaluation



This is a very simple example of a logic model. In this example, you want to start with your outcomes and impacts. The ultimate goal (outcome) in this logic model is to get your students a job as a certified nursing assistant (CNA). To see that they remain employed, you move to the impact box and what their earnings are after 12 months. You can go backward and say, "What do I have to do to get somebody employed as a CNA?"

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You can either go all the way back to the inputs or you can go to activities or outputs. You first identify your resources (instructors, classroom space) and put those in the inputs box. Then you examine what activities you are going to be able to provide after you offer those resources. I'm going to be able to provide CNA courses. When you've offered those courses, what do you think that will produce? I will retain a certain number of students in my program and you would enter that in your outputs box.

This is a simple example of what a logic model would look like.

Step 1: Describe your desired results, outcomes, and impacts
Outcomes can be difficult sometimes because of different terminologies. Sometimes they're called program results, goals, objectives, or impacts. These terms are all interchangeable and you don't want to get tripped up on the language. You want to think about the results that your program intends to achieve if implemented as planned.

If you want to make a distinction between outcomes and impacts, you can think about outcomes as the changes that occur or the difference that is made for individuals (or other target group) during or after the program (comparison group). The difference between the outcomes between your participant group and the outcomes of the comparison group can be the impact. That's what you can attribute to your program.

Just doing a particular activity isn't the same as achieving a result. You can track data about an activity (number of enrolled students or classes held). That information is valuable because it helps you monitor your program's implementation and performance and report on your quarterly measures, but those data are outputs (activity data), not outcomes, which refer to the results you expect to achieve in future years.

Defining desired outcomes first will help you …

- Streamline resource use to support program activities and maximize the likelihood of positive outcomes
- Develop activities and services focused on achieving outcomes
- Work backward from long-term impacts to short-term outcomes and intermediate objectives that support them

If you look at the example, you can organize the outcomes into short-term outcomes, intermediate outcomes, and long-term impacts.

Short-term outcomes focus on immediate changes in knowledge, attitudes, intentions, behaviors, and skills, such as program retention, course completion, or intention to find a job. In the example, retaining the students in the program would be the output and then the outcome would be to have a student conduct job search activities. That's a behavior that can lead to the intermediate outcome.

Intermediate outcomes focus on key behaviors and skills that the program seeks to support, such as program or credential completion, skills development, or entering a job.

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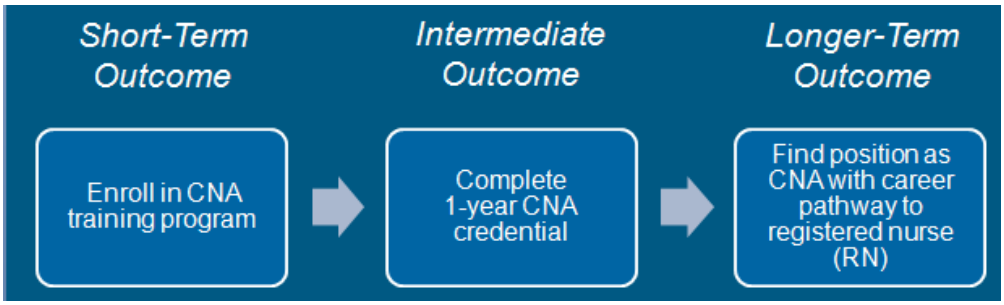
Long-term impacts focus on primary long-term changes in status or behavior, such as gaining employment in targeted fields, maintaining employment, or increasing income.



Step 2: Identify your resources or inputs
There are also different terminologies for inputs (resources, assets), but it's what you have available to put toward your program. Those might fall into some of these categories:

Common Resource Types

- **Human resources:** staff, specialized instructors, consultants, volunteers, collaborating partners, partners in the community, networks
- **Financial resources:** operating budget, grants, donations, other monetary resources
- **Space:** offices, classrooms, specialized rooms, other facilities, your organizational capacities
- **Technology:** computers, smart boards, software, communications (email, website, intranet, social media)
- **Materials and equipment:** office machines, equipment specific to skills-building activities, office supplies, program materials, training materials, insurance
- **Relationships:** potential employers, data sources, memorandums of understanding (MOUs)

Another good idea is to think of a resource as attitudes, policies, and laws, and even geography if you're in a consortium. The geography can be a resource that you want to think about; it can be something that can facilitate your program, but it can also limit your program. When you consider your resources, you want to think about that broader spectrum as well. Are there policies in place that make it hard for me to get this program implemented? What are people's attitudes about this program? Are they excited or do they not want to have anything to do with it? Those can be inputs that can limit your program as well as help your program along. If you can identify any kinds of inputs that could be limiting your program, you can think about ways to change them or to put them into a direction where they could be more supportive of what you're doing.

Step 3: Describe your program activities and services
Your program activities are the actions you're going to take to implement your program—what those actions become.

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What will your program do with its resources to bring about your desired change or results?

- **Develop products:** curricula, program manuals or texts, promotional materials
- **Provide services:** screening and diagnostics, education, training, skills-building, counseling, workshops, referrals
- **Build infrastructure/partnerships:** developing new and strengthening existing partnerships with employers, institutional management structures that you want to improve or use in a certain way to support your program, consortia relationships, organizational capacities

You don't want to get too specific because that could get overwhelming. This part of your logic model isn't really a to-do list, but should really hit the major components at a higher level and what your program activities are.

Step 4: Determine your planned program outputs

Outputs are the measureable, tangible, and direct products of your program activities. Outputs are not the changes you expect your program to achieve (these are your outcomes or impacts).

One way to think about an output is in terms of the size and/or scope of the services or products delivered or produced by your program. When you get to your outputs columns (when you can start to think about some of your reporting requirements) it's a good idea to think about how you can express your outputs in terms of quantities or the existence of something new. Did we build something we planned to build? Did we build a new partnership?

You don't want to get stuck on exact numbers; you can estimate based of your experiences and your plans and what resources you have available.

Examples of Program Outputs

- Number of informational sessions held/participants attending
- Number of potential students screened and enrolled
- Number of employer partnerships formed
- Number and types of curricula developed
- New facilities opened
- Number of course units provided/completed
- Number of students retained and/or completing the program

Step 5: Link it all together

Make sure your logic model is SMART:

- Specific
- Measureable
- Action-oriented
- Realistic
- Timed

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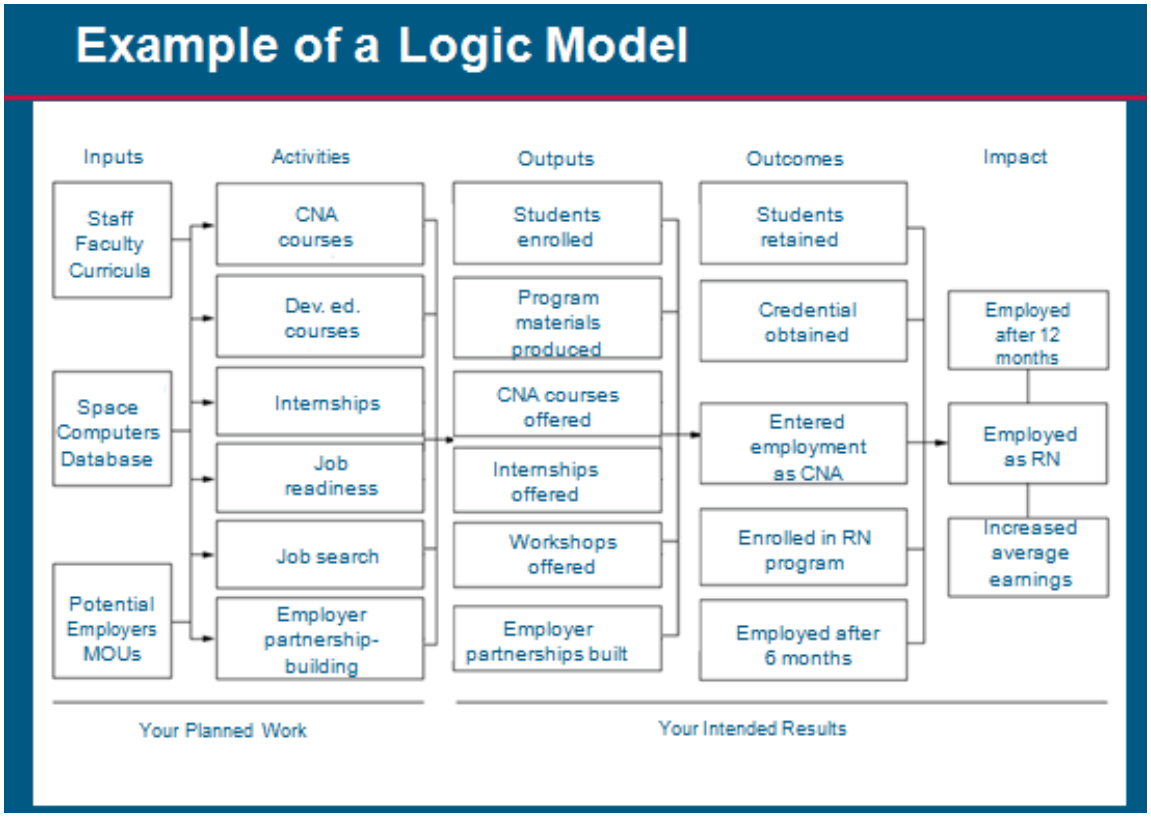
In terms of thinking about measurement and evaluation, measurability is particularly important. You want to think about if you've defined your program components in a way you can measure. Have you done this in a way that enables you to collect data? If so, can you collect data reliably? When you have these data, how will you track them and use them to report to DOL? How can you use them to support your program?

Making sure you go back to link the different parts of your program so that they are SMART and very measurable will help you to see the connections between those reporting requirements and your own programs.

This is a more complex version of the CNA example shown before.



Here it fleshes out what might be the various components of your program. You can see the inputs are some of the ones I listed in the simpler model, where you have staff and space. The way these are grouped is not necessary. I did it this way to show that you can create different groupings of inputs and that might help you assign different components of budget to them. It might help you assign different staff to be responsible for them. It's just an idea about how to put things together in a way that clearly shows there might be some differences among your inputs, whether by virtue of budget or who or what institution is responsible for them. Together, they all feed into your activity.

Continued Uses for Logic Models

Now that you have created a logic model, you can put it to work to

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- **Build** understanding and promote buy-in among stakeholders about what your program is, how it works, and what it is trying to achieve
- **Communicate** at a glance what your program is doing (activities) and what it is achieving (outcomes)
- **Explain** to funders your accomplishments, where they came from, and what is needed to maintain and extend them
- **Tell** your story to potential clients, donors, policymakers, and media; explain what you did and how you did it
- **Measure and evaluate** your accomplishments—locate activities, outputs, and outcomes that can be reliably and feasibly measured

References and Additional Resources

Anderson, Andrea. *The Community Builder's Approach to Theory of Change*. New York: The Aspen Institute Roundtable on Community Change, 2005.

Card, J.J., Jacqueline Berman, and Julie Solomon. *Building Culturally Competent HIV Prevention Programs.* Cambridge, MA: Springer Publications, 2007.

Horsch, Karen. "Using Logic Models for Program Planning and Evaluation." Place-Based Education Evaluation Collaborative, 2008. Available at http://www.peecworks.org/PEEC/PEEC_Inst/S01795CB7-01795F46.

Innovation Network. *Logic Model Workbook.* Washington DC: Innovation Network, 2010.

Kellogg Foundation. *Logic Model Development Guide*. Battle Creek, MI: Kellogg Foundation, 2004.

Medical Reserve Corps. "Training Guide #2: Logic Models." Rockville, MD: Medical Reserve Corps, n.d.

Renger, Ralph, and Allison Titcomb. "A Three-Step Approach to Teaching Logic Models." *American Journal of Evaluation,* vol. 23, no. 4, 2002, pp. 493–503.

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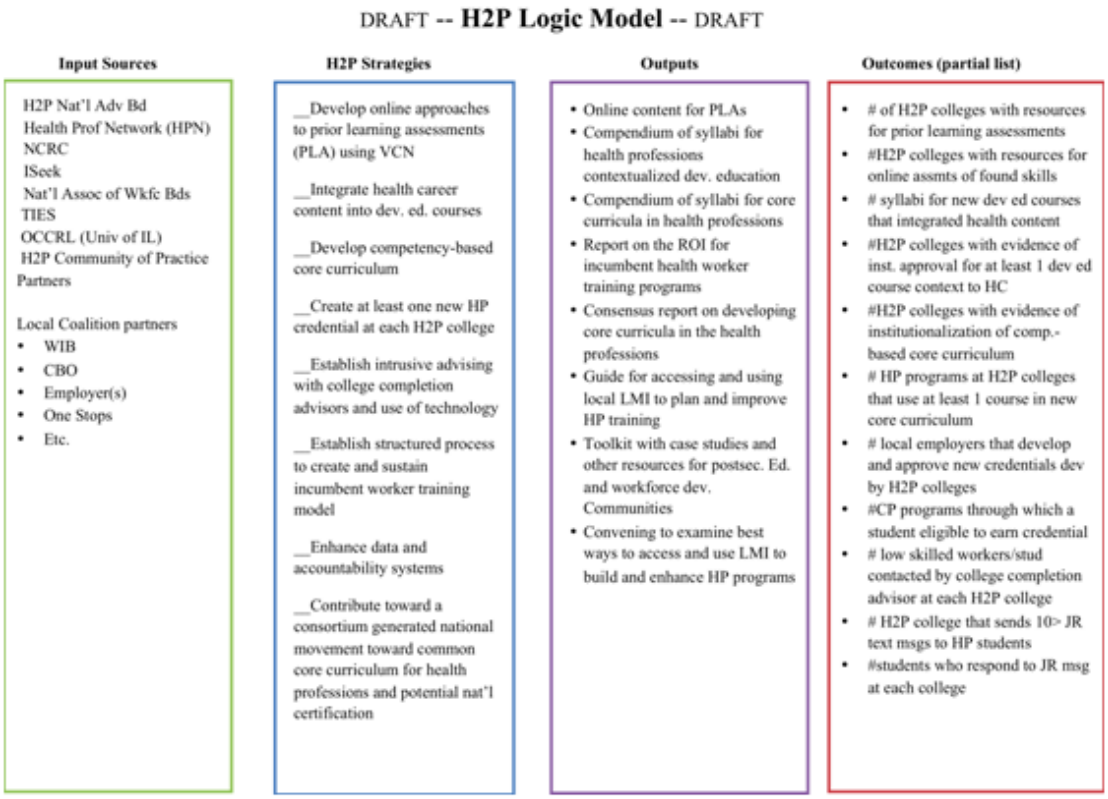
Presentation II: Cathy Kirby, Office of Community College Research and Leadership (OCCRL), University of Illinois at Urbana-Champaign

This presentation is related to the Health Professions Pathway (H2P), which is one of three national consortiums from the round one grantees. The H2P is composed of nine colleges. These are tools that we prepared for this grantee and the consortium, beginning with the logic model. Here is a draft of the logic model. We say *draft* because we continue to use the logic model throughout the evaluation.



We start with a very simple draft of how we use the strategies and the projects in a logic model format taken from the proposal. It's very instructive for the evaluation staff and for the consortia to start looking at a complex project in a simplified way. It is simplified, but it helps to look at the project when you think about how complex it looked in the proposal of what you intend to do. But when put into these categories, it helps everyone understand the context, the inputs, and the resources. You can connect the strategies, outputs and how you're going to measure them in outcomes and impacts.

We created this at the beginning of our project and shared it with our consortium partners. It's one of the first things we always do in evaluations. Not only does it help us get very clear about the project, but it starts a very different communication with the grantees about what they all are doing.

Writing these proposals was done in different ways by different applicants, but not all partnered consortiums necessarily understand all of the parts from the very beginning. Grant writing is

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hectic, it's last minute. There are so many parts to these projects that bringing them all together in a logic model is a wonderful way to get everyone on the same page.

That said, it's simplified, but for some people who haven't seen or used logic models, it's hard to understand. It's instructive. As an evaluator, it's good to talk and have conversations with partner members who are part of your resources columns or input sources. Personal, face-to-face conversations can help them understand how these pieces relate to one another.

The logic model is written for the client, but also for the evaluation team. If you have more than one evaluator, it helps to establish the kind of communication that you need to work well as a team throughout the term of the project.

We thought this was a little but overwhelming for our site in practice, but there were a lot of pieces to this puzzle. We find that it continues to be helpful to us and we will be using the logic model at our site visits, when we visit the colleges involved to bring them back to the evaluation and discuss any changes. Some things aren't changeable, but there might be other resources that have been added as the project has gone along. We'll update the logic model as we can. It does help everyone to understand where we're starting and where we're going.

It's important to think about the context of the evaluation, the people resources, and the partner resources. There's also a context within which our project operates. All of those things play into how your project is going to work out.

In column two, we included the strategies this consortium is employing to reach its outcomes and impacts. Each consortium is spelled out; the outputs are here as well in column three (taken directly from the proposal). This is a partial list of outcomes expected. We don't have these separated out as we've done in other evaluations for short-, mid-, and long-term outcomes, but we could easily do that as we go along and make changes to the logic model.

H2P Progress and Implementation Planning Guide

This tool helped us with the site as part of the progress and implementation planning guide. We knew that after going through the logic model, we needed to achieve a deeper level of understanding with the sites and the strategies and their related outcomes. This guide really helped the colleges see the connection at a more detailed level and the planning guide has each strategy blown up so that for each strategy the colleges are asked to describe what they're going to do to achieve that strategy. There are questions that are posed to them that they are to develop on their own and have conversations at the local level, as well as for them to identify what their technical assistance needs might be so that those can be anticipated and met. At the beginning you don't always know what you're going to need to know, but it's meant to be a living document.

Colleges continue to use this planning guide and we were very grateful that it has been helpful to them. Each of the strategies has about two pages for the colleges to provide us feedback so we could see where they were and what they were planning, also for the colleges to use as a working document.

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Time Line for Major Activities on Progress and Implementation Evaluation
The time line was another tool that we created to help the partner colleges see their activities related to the Department of Labor's quarterly and annual reporting deadlines. As you know, some strategies are reported at the student level and this document helps keep people on track to see where the activities that they've planned and proposed fall within the three-year time line of the grant.

Graphic Model of H2P consortium
You'll notice that the eight strategies developed by this consortium follow the numbers. The graphic includes the measures by which each strategy will be measured and for which it will be accountable.

We've created other tools that we believe help the colleges communicate within the college and across the colleges with the lead college and with us to help keep this evaluation aligned and always at the heart of what the colleges choose to do because we do think the evaluation is very much linked to their daily activities as an instructive guide for people who are on the ground and measuring progress and implementation.

We've found that this particular model has been more instructive than the original logic model, but the logic model will be very instructive when we make site visits.

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QUESTIONS & ANSWERS, SHANNA JAGGARS, Community College Research Center

I'm wondering if we can hear a little bit more detail about the sub-levels of the H2P planning guide.

KATHY: This is just an overview of the planning guide showing the sections that are included. The planning guide asks the colleges to determine what they're doing specifically for each strategy. For example, in strategy one (Online Assessment and Career Guidance Using Prior Learning Assessments), we provided each college with the consortium targets, what they said they would do, and how many students they would serve and credit hours earned. We also were able to get from the lead college the partner college targets.

This helps the colleges understand that they are responsible for reaching X amount or number or percentage of the total that the consortium is responsible for. It really was helpful for the colleges to start thinking about this on what they needed to contribute. Finally the questions asked in this particular strategy for things like, "What types of assessments the college will use to address strategy one?" The college could select from a list of different types of assessments or provide others that they had decided to employ since the proposal had been written.

Then we have a time line in this planning guide for them to talk about their assessment in a little bit more detail. We ask them about the process for administering their prior learning assessments. What's their plan for providing career guidance, and so on, to help determine what they have in mind. This will be a very instructive document.

It was helpful for us as evaluators to know what the college-level strategies were for obvious reasons, but it was also helpful for the colleges to get together and use the guide to talk among themselves to help plan what they were going to do. This was used relatively early on in year one and I think we received feedback from a technical assistance provider that when she went on site, the colleges said to her, "We are using this on a daily or weekly basis to help keep us on track and to share communications among our college and other partner sites." That's what it was intended to do and we find that it's very instructive.

I just outlined what strategy one looked like, but each strategy was blown up like that, where we asked the colleges to say, "What are your courses, for example, in strategy 2 (contextualize developmental education)?" We ask about things like course titles, number of academic credits the students will earn, start and end dates, the typical things that get these kinds of strategies down to a measurable level and an actionable level, where people can start determining whether they're on target and what they're projected to produce.

Do have just one logic model for the entire grant, which may incorporate multiple strategies? Or do you make separate logic models for individual strategies?

KATHY: I think it could be instructive at the college level, but I think it would be a subset of the consortium. It would also depend on if the college has to address all the priority areas. This is the case for round one sites, but not round two sites. There will be similarities, but some minor differences. In as much as the colleges are very different from one another, there might be a good

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reason to help the sites develop their own. Logic models are such a good instructional tool, and a good tool for communication with the evaluator and the consortium, that the process of doing it is more valuable than the product itself.

JACQUELINE: One thing we've done with different projects is to start by making that 30,000-foot-view logic model like the one Kathy showed where you have the inputs, strategies, and outcomes for the overall program. After you've done that, and you have that 30,000-foot view of the program overall, you can develop logic submodels for each strategy. Sometimes there are different programs or projects within a larger program. You can have a basic logic model for the entire program and then individual logic models that can flesh out each strategy but always reflect the larger structure you've laid out in the primary logic model.

SHANNA: We have the complexity of the logic model that contains multiple strategies. Perhaps those multiple strategies may have their individual logic models as well. Then we have the complexity of different colleges that might have different versions of the logic model. Anne makes a good point: *the process of doing it at the strategy/college level could help support communications between the institutions involved in a single consortium.* It keeps people on the same page. They all know how they plug in to the bigger picture.

Final Comments

KATHY: I like to think of a logic model as a communications tool and I think that anything we can do as evaluators to further the communication among the consortium partners is important. Even if you have a state- or regional-level consortium, implementing a grant such as this is quite a challenge. Any tools we use to keep the conversation going and the understanding clear, a logic model or a planning guide, or weekly calls for example, is worth all of our time.

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APPENDIX D

DEVELOP DATA COLLECTION AND ANALYSIS PLANS TO ADDRESS YOUR PRIORITY LEARNING GOALS: RESOURCES

APPENDIX D.I

COMMON PERFORMANCE MEASURES

This appendix section presents performance measures (measures of student characteristics and outcomes, as well as measures of implementation and progress) that support learning and continuous improvement efforts and that consortiums, colleges, and programs can use to measure performance. These measures are designed to complement the ETA annual performance measures for TAACCCT grantees and to correspond to grantees' quarterly progress and implementation measures.

The measures include the student characteristics and outcome measures required of all grantees as part of ETA annual performance reporting. We have structured and organized all additional measures to align with the four priorities and their corresponding strategies, as articulated in the TAACCCT grant solicitation:

1. Accelerate progress for low-skilled and other workers
2. Improve retention and achievement rates to reduce time to completion
3. Build programs that meet industry needs, including developing career pathways
4. Strengthen online and technology-enabled learning

We aligned measures to the TAACCCT priorities so that grantees can adopt the measures relevant to the priorities they have chosen to address as part of their TAACCCT-funded program.

The first part (Part A) provides an overview of the performance measures, and the second part (Part B) provides technical guidance for developing and using them.

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A. Common Performance Measures at a Glance

Measurement Type	Initiative/Strategy				
	DOL TAACCCT Measure	Strategy 1: Accelerate Progress for Low-Skilled and Other Workers	Strategy 2: Improve Retention and Achievement Rates to Reduce Time to Completion	Strategy 3: Build Programs that Meet Industry Needs	Strategy 4: Strengthen Online and Technology-Enabled Learning
Student Characteristics	– Age – Gender – Ethnicity – Race – Disability status – Incumbent workers – Veteran status – Pell Grant-eligible – TAA-eligible – Full-time/part-time status				
Implementation		– Consistent assessment/placement regime	– Consistent implementation of curricular/student support/procedural innovations to improve retention and achievement rates to reduce time to completion	– Employer partnerships and input	– Implementation of technology-enabled *curricular* innovation – Implementation of technology-enabled innovation in *student support* services – Implementation of technology-enabled *procedural* innovation
Progress		– Delivery of programs to participants assessed below college level – Credit attainment	– Delivery of programs to improve retention and achievement rates to reduce time to completion – Percentage of students retained – Percentage of full-time enrollment	– Delivery of programs that meet industry needs – Job placement	– Development of faculty/staff capacity – Effective delivery of online and technology-enabled tools
Outcomes	– Entered employment rate – Employment retention rate – Average earnings – Credit attainment – Attainment of industry-recognized certificates – Degree attainment	– Basic skills attainment among low-skilled adults – Math and English competency – Course completion – Credential attainment	– Credential attainment	– Attainment of industry-recognized certificates	– Credit attainment

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B. Common Performance Measures Technical Guide

DOL Measures–Student Characteristics			
Characteristics	**Calculations**	**Potential Sources**	**Notes**
Age Gender Ethnicity Race Disability status Incumbent workers Veteran status Pell Grant-eligible TAA-eligible Full-/part-time status of degree-seeking students	Average age For other characteristics, total counts and percentages for each category In addition, use Integrated Postsecondary Education Data System (IPEDS) categories as applicable (for example, age, race/ethnicity)	College Student Information System (SIS)	These requirements are from the TAACCCT Annual Performance Report form. Adding IPEDS age categories will facilitate comparisons with other (non-TAACCCT-funded) programs. Full-/part-time status will use current IPEDS definitions. "Pell Grant-eligible" may not be an attribute tracked at most campuses. "Pell Grant recipient" would be a more commonly available measure.
DOL Measures–Outcome Measures			
Outcome Measures	**Calculations**	**Potential Sources**	**Notes**
Entered employment rate	*Percentage*: Number employed/number of enrollees	State Unemployment Insurance records	This measure is required for Round I TAACCCT grantees. All DOL outcome measures are defined in the original DOL Solicitation for Grant Applications and must be reported annually for both participant and comparison cohorts. As part of our TA, we can provide additional guidance on the topic. Schools that do not have access to UI wage records as a data source may need to consider student surveys as an alternative, though limited, substitute.
Employment retention rate	*Percentage*: Number retained/number entered employment	State Unemployment Insurance records	This measure is required for Round I TAACCCT grantees. Schools that do not have access to UI wage records as a data source may need to consider student surveys as an alternative, though limited, substitute.
Average earnings	Total earnings/number retained in employment	State Unemployment Insurance records	This measure is required for Round I TAACCCT grantees. Schools that do not have access to UI wage records as a data source may need to consider student surveys as an alternative, though limited, substitute.
Credit attainment	A = Total first-year credits across all first-year enrollees B = Number of first-year credit-earning enrollees *Percentage*: A/number of first-year enrollees *Percentage*: B/number of first-year enrollees	College SIS	This measure is required for Round I TAACCCT grantees.

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Attainment of industry-recognized certificates	A = Number of enrollees earning less-than-one-year certificate B = Number of enrollees earning more-than-one-year certificate *Percentage*: A/number of enrollees in program *Percentage*: B/number of enrollees in program	Student survey; College SIS	This measure is an existing ETA outcome measure. The concept of "industry-recognized certificate" should comply with extant ETA guidance. Note that current guidance explicitly excludes "work readiness" certificates from the numerator of this measure.
Degree attainment	A = Number of enrollees earning a degree within two years *Percentage*: A/number of enrollees	College SIS	This measure is required for Round I TAACCCT grantees.

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STRATEGY 1. Accelerate Progress for Low-Skilled and Other Workers			
Implementation Measures	**Calculations**	**Potential Sources**	**Notes**
Consistent assessment/ placement regime	Percentage of colleges/programs implementing consistent regime	Placement policies/ procedures	Understanding and treatment of low-skilled will vary from occupational to academic criteria across grantees. Definition of "consistent" will need to be developed and documented.
Progress Measures	**Calculations**	**Sources**	**Notes**
Delivery of TAACCCT-funded developmental education programs to participants assessed below college level	A = Number of participants in developmental programs redesigned with TAACCCT funds *Percentage*: A/number of students in the cohort assessed below college level	College SIS	Will require consistent categorization of what qualifies as "redesigned."
Average credit attainment	A = Total first-year credits for all first-year participants assessed below college level B = Number of first-year credit-earning participants assessed below college level *Average*: A/number of first-year members of cohort assessed below college level *Percentage*: B/number of first-year members of cohort assessed below college level	College SIS	Aligns with ETA-required outcome, but applies to subgroup of students assessed below college level.
Outcome Measures	**Calculations**	**Sources**	**Notes**
Basic skills attainment	A = Number of Adult Basic Education (ABE) enrollees who increase one skill level or more during the first year of enrollment *Percentage*: A/number of ABE enrollees ever enrolled in the program during the year	College SIS	Suggested approach for ETA-required outcome; would require consistent measurement of skill levels and tracking of ABE enrollment.
Math competency	A = Number of enrollees assessed below college level in math who complete math developmental courses within two years of entry B = Number of enrollees assessed below college level in math who complete a college-level math course within two years of entry *Percentage*: A/number of enrollees assessed below college level in math *Percentage*: B/number of enrollees assessed below college level in math	College SIS	Suggested by ETA; aligns with Bill and Melinda Gates Foundation (BMGF) grantee Data Capture System and with Complete College America.
English competency	A = Number of enrollees assessed below college level in English who complete English developmental courses within two years of entry B = Number of enrollees assessed below college level in English who complete a college-level English course within two years of entry *Percentage*: A/number of enrollees assessed below college level in English *Percentage*: B/number of enrollees assessed below	College SIS	Suggested by ETA; aligns with BMGF grantee Data Capture System and with Complete College America.

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	college level in English		
Course completion	A = Number of TAACCCT funded courses successfully completed *Percentage: A/number of TAACCCT funded courses attempted*	College SIS	Courses are included in the measure regardless of their credit-bearing status.
Credential attainment	A = Number of enrollees assessed below college level who earn a credential within two years of enrollment *Percentage*: A/number of enrollees assessed below college level	College SIS	
STRATEGY 2. Improve Retention and Achievement Rates to Reduce Time to Completion			
Implementation Measures	**Calculations**	**Potential Sources**	**Notes**
Consistent implementation of TAACCCT-funded *curricular* innovations to improve retention and achievement rates to reduce time to completion	Percentage of colleges or programs implementing curricular innovations to improve retention and achievement and reduce time to completion	Documentation of TAACCCT program implementation	Must be categorized consistently; could include, for example, modularized courses, use of instructional software, or course redesign; interpretation must be cautious, because not all innovations are intended for implementation across all sites.
Consistent implementation of TAACCCT-funded *student support service* innovations to improve retention and achievement rates to reduce time to completion	Percentage of colleges or programs implementing support service innovations to improve retention and achievement and reduce time to completion	Documentation of TAACCCT program implementation	Must be categorized consistently; could include, for example, self-advising or tutoring; interpretation must be cautious, because not all innovations are intended for implementation across all sites.
Consistent implementation of TAACCCT-funded *procedural* innovations to improve retention and achievement rates to reduce time to completion	Percentage of colleges or programs implementing procedural innovations to improve retention and achievement and reduce time to completion	Documentation of TAACCCT program implementation	Must be categorized consistently; could include, for example, registration and enrollment policies, governance models, and articulation agreements; interpretation must be cautious, because not all innovations are intended for implementation across all sites.
Progress Measures	**Calculations**	**Potential Sources**	**Notes**
Delivery of *curricular* programs to improve retention and achievement rates to reduce time to completion	A = Number of participants in TAACCCT-funded curricular programs to reduce time to completion *Percentage:* A/number of cohort members eligible to participate	College SIS	Would require definition of parameters for participation.
Delivery of *student support* programs to improve retention and achievement rates to reduce time to completion	A = Number of participants in TAACCCT-funded support activities to reduce time to completion *Percentage:* A/number of cohort members eligible to participate	College SIS	Would require definition of parameters for participation.
Percentage of students retained term to term	*Percentage: (*Number of students in cohort active in term + number of students who have successfully completed)/number of students in cohort	College SIS	Suggested by ETA; requires common definition of *active students* and *cohort.*
Percentage in full-time enrollment	*Percentage:* Number of full-time students/ number of students	College SIS	Potential indicator of early momentum; easy to track and report.

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Outcome Measures	Calculations	Potential Sources	Notes
Credential attainment	Time to credential A = Number of enrollees who earn a credential within 100 percent of expected time B = Number of enrollees who earn a credential within 150 percent of expected time C = Number of enrollees who earn a credential within 200 percent of expected time *Percentage:* A/number of enrollees *Percentage:* B/number of enrollees *Percentage:* C/number of enrollees	College SIS	Aligns with Complete College America measure.
STRATEGY 3. Build Programs that Meet Industry Needs, Including Developing Career Pathways			
Implementation Measures	**Calculations**	**Potential Sources**	**Notes**
Employer partnerships and input	Number of active partnerships with employers Number of pathway programs revised or implemented with employer partner involvement	MOUs or other documentation of employer partnerships	Would have to operationally define *active partnership* and *pathway program.*
Progress Measures	**Calculations**	**Potential Sources**	**Notes**
Delivery of programs that meet industry needs	A = Number of participants in programs to designed to meet industry needs *Percentage:* A/number of cohort members eligible to participate in programs designed to meet industry needs	College SIS	Would have to operationally define *enrollment, cohort,* and *eligibility* for programs designed to meet industry needs.
Job placement	A = Number of enrollees placed in jobs through institutional efforts B = Number of enrollees placed in jobs in field of study through institutional efforts *Percentage:* A/total number of students *Percentage:* B/total number of students	Career placement offices, student surveys	Would require definition of "through institutional efforts." Could be progress measure, because it does not have to be at the end of the program.
Outcome Measures	**Calculations**	**Potential Sources**	**Notes**
Attainment of industry-recognized certificates	A = Number of enrollees earning less-than-one-year certificate B = Number of enrollees earning more-than-one-year certificate *Percentage:* A/enrollees in program *Percentage:* B/enrollees in program	College SIS, student surveys	Existing ETA outcome measure. The concept of "industry-recognized certificate" should comply with extant ETA guidance. Note that current guidance explicitly excludes "work readiness" certificates from the numerator of this measure.

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STRATEGY 4. Strengthen Online and Technology-Enabled Learning			
Implementation Measures	**Calculations**	**Potential Sources**	**Notes**
Implementation of TAACCCT-funded technology-enabled *curricular* innovation	Percentage of colleges/programs implementing curricular innovations to strengthen learning	Documentation of TAACCCT program implementation	Curricular innovations must be categorized consistently (for example, courseware tools or learning management systems).
Implementation of TAACCCT-funded technology-enabled innovation in *student support services*	Percentage of colleges/programs implementing support service innovations to strengthen learning	Documentation of TAACCCT program implementation	Support service innovations must be categorized consistently (for example, online or self-advising tools, computer-based tutoring, or social media applications).
Implementation of TAACCCT-funded tech-enabled *procedural* innovation	Percentage of colleges/programs implementing procedural innovations to strengthen learning	Documentation of TAACCCT program implementation	Procedural innovations must be categorized consistently (for example, learning management systems, systems to track student progress, or early warning systems).
Progress Measures	**Calculations**	**Potential Sources**	**Notes**
Development of faculty/staff capacity to use TAACCCT-funded technology-enabled systems or tools	*Percentage:* Number/percentage of faculty/staff trained in TAACCCT-funded, technology-enabled systems or tools *Percentage:* Number/percentage of faculty/staff actively using TAACCCT-funded systems or tools	College SIS, surveys of faculty/staff, rosters or logs from training sessions	Measures can be computed separately for: I) curricular/instructional systems/tools II) procedural systems/tools III) student support systems/tools Will require an operational definition of *relevant* and *active* and specification of appropriate denominators.
Delivery of TAACCCT-funded online and technology-enabled tools	Percentage of students enrolled in courses using TAACCCT-funded, technology-enabled curricular/instructional systems Percentage of students regularly accessing technology-enabled student support systems	College SIS, access logs from student support systems	Will need an operational definition of *regularly accessing* (for example, twice per term); will need an operational definition of the appropriate denominator to use for these percentages.
Outcome Measures	**Calculation**	**Potential Sources**	**Notes**
Credit attainment	*Percentage:* Credits earned using curricular systems/credits attempted using TAACCCT-funded, technology-enabled curricular systems Average grade point average for students in courses implementing TAACCCT-funded, technology-enabled curricular systems	College SIS	Measures can be benchmarked against similar metrics calculated for a comparison group.

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APPENDIX D.II

QUALITATIVE RESEARCH GUIDE

This appendix section contains a worksheet that can help you determine whether your evaluation and measurement system might benefit from using qualitative methods and, if it will, can help you structure that research.

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QUALITATIVE RESEARCH

Qualitative research can be used to study your implementation process. This handout provides some assistance on designing a qualitative study.

I. Refining Research Questions

Can the question be answered using qualitative methods?

Qualitative questions are open-ended and best at answering *how* and *what.*
Avoid causal questions, questions that require comparing factors.

Qualitative Question	*Quantitative Question*
How are the TAACCCT-funded reforms being implemented?	Are the TAACCCT-funded reforms successful?

Can the question be answered within the timeframe and resources of the project?

Consider how much data would be required to answer the question.
If the question includes a temporal element, ensure it fits the project timeline.

Manageable Question	*Overly Ambitious Question*
How are students responding to the reforms?	How are the reforms improving student learning?

Is the question clear?

Avoid unnecessary jargon and define key terms.
Use singular questions that ask about one component of research problem.

Clear Question	*Unclear Question*
What are examples of promising instructional practices?	How do models of developmental contextualization and modularization vary across colleges and affect students differently?

Will answering the question help achieve the project goals?

Consider how answers to the question would inform next steps.

Actionable Question	*Less Actionable Question*
What challenges are stakeholders facing in implementing the reforms?	How do the reforms affect institutional culture?

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II. Research Design: Aligning Goals, Questions, and Methods

Project Goals	Research Question	Data Sources[1]	Key Informants	Targeted Questions
• To find out how the consortium is implementing the TAACCCT-funded reforms • To gather information about the types of support the consortium needs to improve implementation	How are colleges implementing the reforms?			
	What challenges are stakeholders facing when trying to successfully implement the reforms?			
	What promising practices may be duplicated at other colleges?			
	What additional supports do colleges need to successfully implement the reforms?			

[1] For example, data sources may include documents and web sites, interviews (focus groups and/or one-on-one), and surveys.

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III. Focus Groups and One-on-one Interviews

Good Qualitative Interview Questions	
Neutral/ Non-leading	Questions should make few assumptions about the dimensions along which the participant will answer. Leading: What has contributed to the success of this program? Neutral: How would you describe the program's performance thus far?
Open-ended	Dichotomous questions are a natural part of speech, but should be avoided in interviews. Dichotomous: Do you think this program is preparing you for employment? Open-Ended: What is the program doing well to prepare you for employment? What is the program not doing well?
Singular	Ask a single question. Do not ask a question that conveys two or more ideas. Not singular: What immediate and long-term changes to the program would you recommend? Singular: Although it is early in the implementation process, what changes would you recommend?
Concrete	Ask a concrete question. Abstract questions can elicit idealized responses. Abstract: How would you describe the dynamics of the colleges in the consortium? Concrete: How often do stakeholders from different colleges communicate about the program?
Role Playing	Role-playing disassociates the interviewer, and tends to elicit more details. Example: Suppose it's my first time in the Workforce Readiness Center. What would it be like?

Disposition When Interviewing	
Explain your purpose clearly.	Be sure that interviewees and others understand: • Your role • The purpose of the research • What you hope to learn from them • If and how they will benefit from the research • How the results will be used
Keep your promises.	This may apply to: • Confidentiality: If you say you will not attribute statements to them, don't. • Resources and follow-up: If you say you can provide resources or other information, be sure to do so.

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Maintain a neutral demeanor.	Your primary job is to listen. • Strive to appear open and empathetic, but relatively neutral. • Do not express any judgments or opinions.
Make the familiar strange.	Although you may have knowledge of the topic, seek to see it with new eyes. • Strive to understand participants' perspectives and experiences. • Identify and attempt to set aside your assumptions and biases.

Tips for Interviewing	
Sequence of Questions:	• Group questions on similar topics together, and organize the questions thematically or chronologically. • Involve the interviewee early by asking open-ended background questions • Avoid long lists of fact-based questions. • Save controversial questions until later in the interview.
When you want to elicit more information from an interviewee:	• Tell me more about that. • Walk me through a typical [INSERT class, meeting, etc.]. • Can you give me an example? • What was that like?
When an interviewee is only expressing negative views:	• I would imagine those are concerns a lot of faculty would raise. • Wow, that sounds like it's been hard. • How would you suggest that concern be addressed?
When an interviewee is making generalizations:	• What do you mean by that? • Is that typical? • How often does that come up? • Is that across all [INSERT students, faculty, staff, classes, etc.]?
When you want to redirect a talkative interviewee:	• Interesting. How has that affected your experience with [INSERT topic you want to hear about] ? • That's helpful! I'm watching our time, and I want to make sure we cover…

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APPENDIX D.III

SURVEYS OF STUDENTS, GRADUATES, AND EMPLOYERS

This appendix section presents the PowerPoint slides from a presentation on surveying students, graduates, and employers given at a TAACCCT Evaluation & Measurement Convening on August 7 and 8, 2012. The convening was sponsored by BMGF and hosted by Mathematica and CCRC.

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General Principles for Creating Comparison Groups

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What is internal validity?

- How do we know that a program is successful?
  - Anecdotes?
  - Surveying program completers?
  - Interviewing employers?
- DOL/funders/administrators/policy-makers may want evidence of the success that is more "rigorous"
- A rigorous, well-implemented evaluation can provide credible/compelling evidence of a program's impact

➢ ***An evaluation that is internally valid provides credible/compelling evidence of a program's impact.***

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Goals

- Illustrate importance of comparison group
- Identify components of a rigorous evaluation that funders/administrators will find as compelling evidence of success
- Determine potential threats to validity of TAACCCT evaluations
- Establish solutions to improve the internal validity of each evaluation

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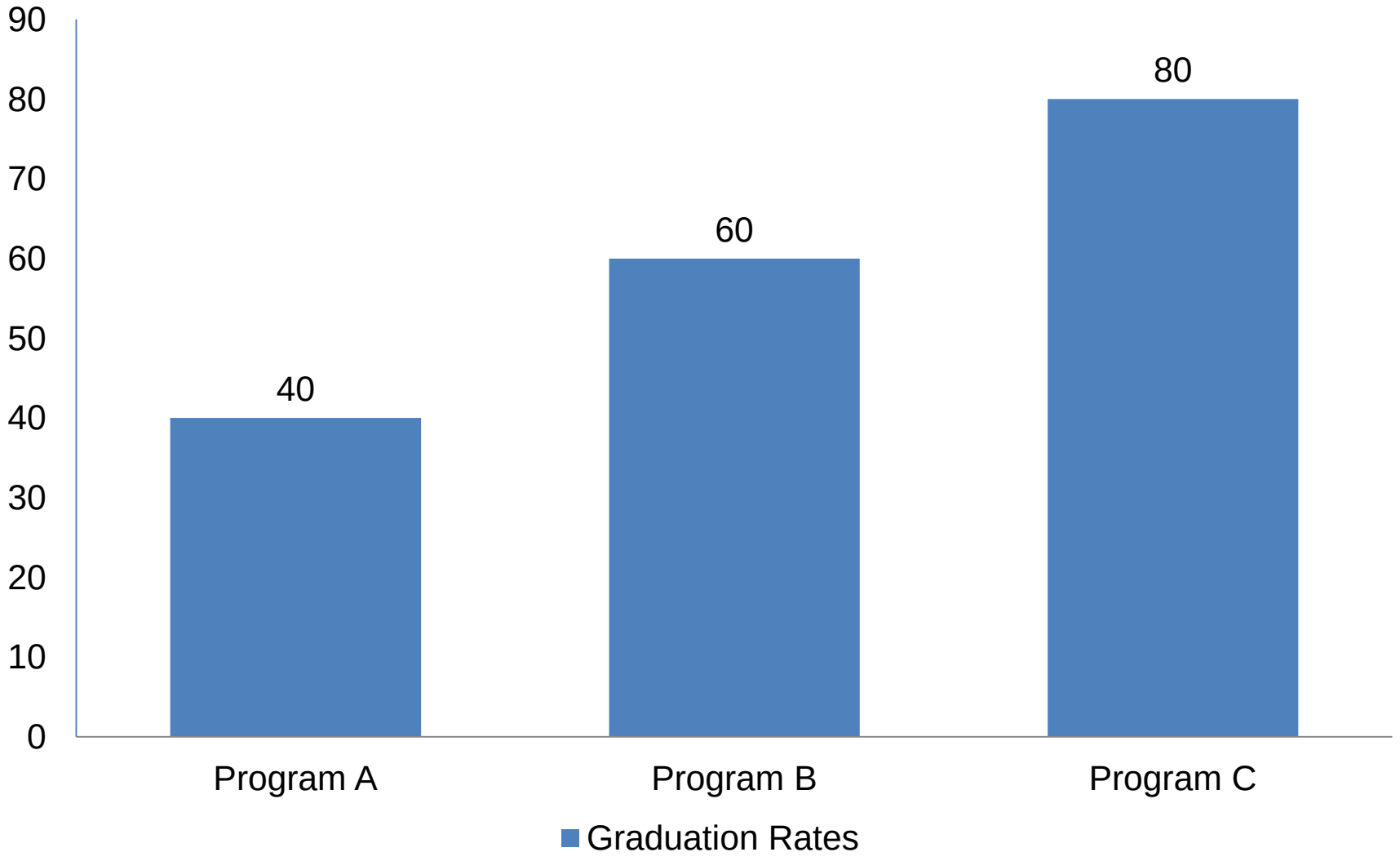
Treatment group results can be deceiving



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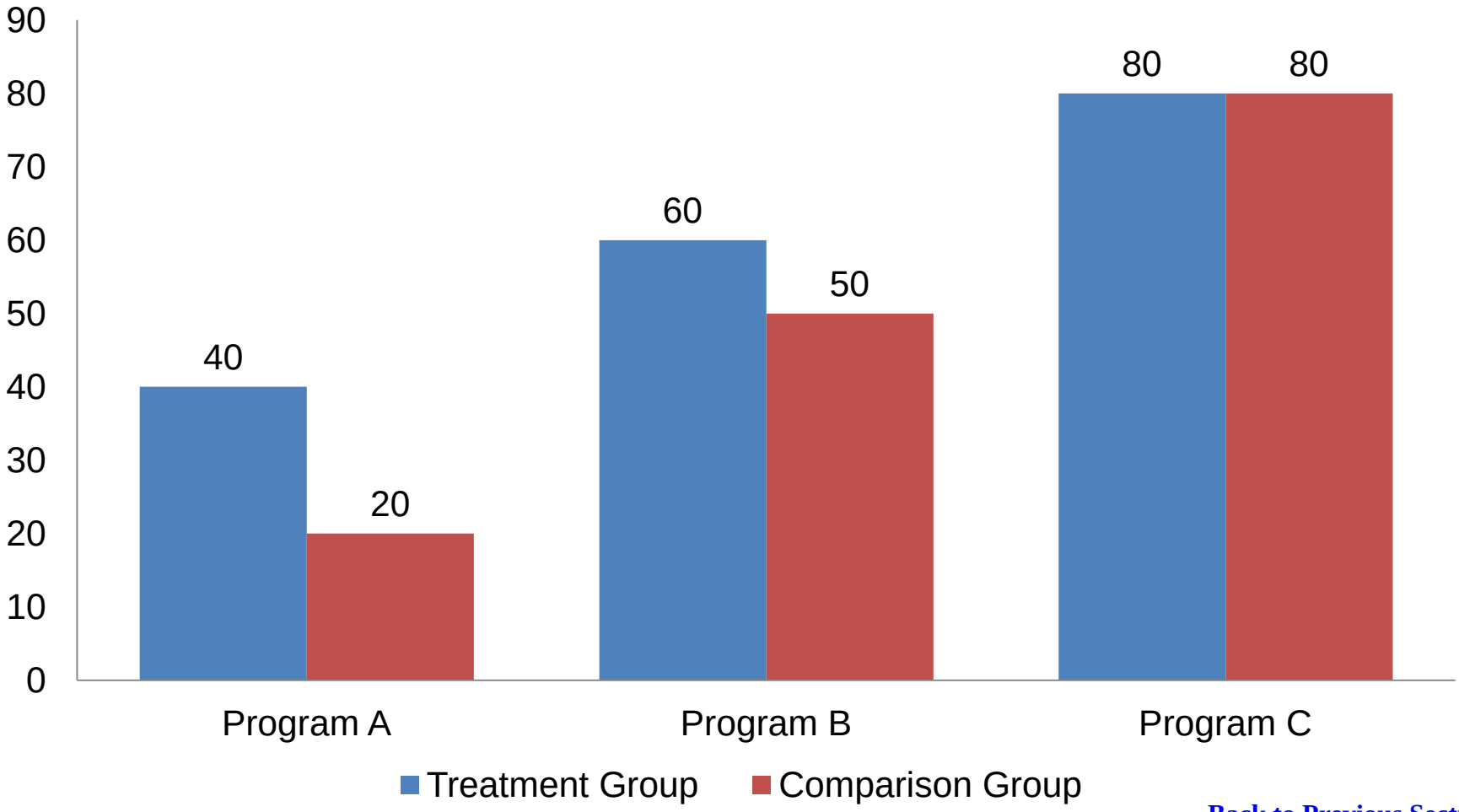
… What would have happened without the program (similar comparison group)



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A comparison group is a step in the right direction…

- But having a comparison group is not a panacea…
- The credibility of our treatment vs. comparison "effect" depends on the extent to which the only difference between the two groups is participation in the program

➢ ***A comparison group is necessary but not sufficient to appropriately articulate the effects of a program on outcomes.***

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A randomized controlled trial (RCT) serves as the "gold standard" for demonstrating the impact of a program

- Students randomly assigned to receive the program or not
- Only difference between the students is receipt of the program
- And thus, differences in outcomes (e.g., graduation rates) are solely due to differences in the program that the students receive

➢ ***RCTs allow for the best evidence of program effectiveness because they ensure that students are "similar" across conditions.***

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What do we need to do to convince a skeptical critic?

- We need to do more to convince our audience that the evidence is compelling…
- Though the results may be seen as providing a lower tier of evidence

➢ ***It is possible to demonstrate credible program impacts without a RCT – but there will be caveats to the findings.***

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Components of an internally valid comparison

- A rigorous impact evaluation should be able to mitigate the following threats to an internally valid comparison *(Campbell & Stanley, 1963)*:
  - Selection
  - History
  - Instrumentation

➢ ***There are three key threats to internal validity that we should keep in mind.***

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Selection threat

- Students in treatment and comparison groups are very different from each other
  - For example, treatment group has better employment history than comparison group
- At end of program, we observe differences in student earnings, and it's impossible to distinguish whether differences are due to
  - The true effect of the program, or
  - Differences in the students at baseline that persist

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Mitigating the selection threat

- Choose a good comparison group that has students that are similar to the treatment students
- Show that the students are similar to each other at baseline
  - Provide means/standard deviations for treatment and comparison groups on variables that are expected to be related to the outcome
  - Especially "pretest" types of measures of student academic outcomes and previous employment/earnings
- Statistically control for baseline differences in final impact analyses

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History threat

- External events cause the observed changes in earnings
- Only a problem in studies where prior year cohort(s) is/are compared against a current cohort
- Example:
  - Treatment group = 2012 graduating cohort
  - Comparison group = 2011 graduating cohort
  - Context: Economy improves in 2012, and everyone in the treatment group gets a high-paying job
- The observed differences we see in earnings are due to
  - The true effect of the program, or
  - The external event of general economic improvement

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Mitigating the history threat

- Use available data from another set of students (not those in the treatment or comparison groups)
  - For example, two cohorts of students in different programs from treatment and comparison groups

- Compare differences in outcomes over time for this additional set of students, relative to differences observed in the treatment and comparison groups

➢ ***This is really an exercise in convincing a critical reader that an earlier cohort is a valid comparison group.***

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Instrumentation threat

- Differences in how the outcome of interest is measured across treatment and comparison groups confounds the observed difference
  - Treatment group = wage data obtained through DOL
  - Comparison group = wage data obtained through survey
- Observed differences in the outcome due to
  - The true effect of the program, or
  - The differences in the outcomes obtained across the two sources

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Mitigating the instrumentation threat

- Don't use two different data sources (or different methods) for obtaining outcome measures

- If it's necessary to use two data sources, try to obtain data from both sources for some students
  - Show that the data are similar across both sources (e.g., correlation of outcomes across sources, magnitude of difference in outcomes across sources)

➢ ***Like the history threat, this is really an exercise in convincing a critical reader that instrumentation differences are not a problem.***

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Best practices for comparison group studies

(Based on the WWC Standards)

- Show impacts on outcomes that are reliable
- Demonstrate the equivalence of the analytic sample at baseline (mitigate the selection threat and history threat, if applicable)
  - Statistically adjust for any baseline differences in impact analyses
- Do not have a systematic difference between the treatment and comparison groups
  - No systematic difference in data collection elements (mitigate instrumentation threat)
  - No "confounding factors" that align with the treatment being tested

➢ ***Follow WWC standards for compelling research evidence!***

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APPENDIX D.IV

CONSTRUCTING CREDIBLE COMPARISON AND TREATMENT GROUPS

This appendix section presents the PowerPoint slides from a presentation on constructing credible comparison and treatment groups given at a TAACCCT Evaluation & Measurement Convening on August 7 and 8, 2012. The convening was sponsored by BMGF and hosted by Mathematica and CCRC.

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Constructing Credible Comparison and Treatment Groups

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Overview

- Review of internal validity
- Challenges in constructing credible comparison and treatment groups
- Framework for constructing credible comparison and treatment groups
- Minimizing “discrepancies”
- Picking cohorts for each group

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Well-Designed Experimental Groups

- Treatment groups should be coherent
  - Constant treatment intensity
- Grantees are required to construct comparison groups
  - Serves as the counterfactual condition
  - Similar in all ways except the intervention

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Comparison Group Challenges

- Potential programs of study are diverse
  - Degree or certificate
  - Industry
  - Training program length
- Potential study participants are diverse
  - Declared program of study
  - General studies only
  - New students
  - Returning students

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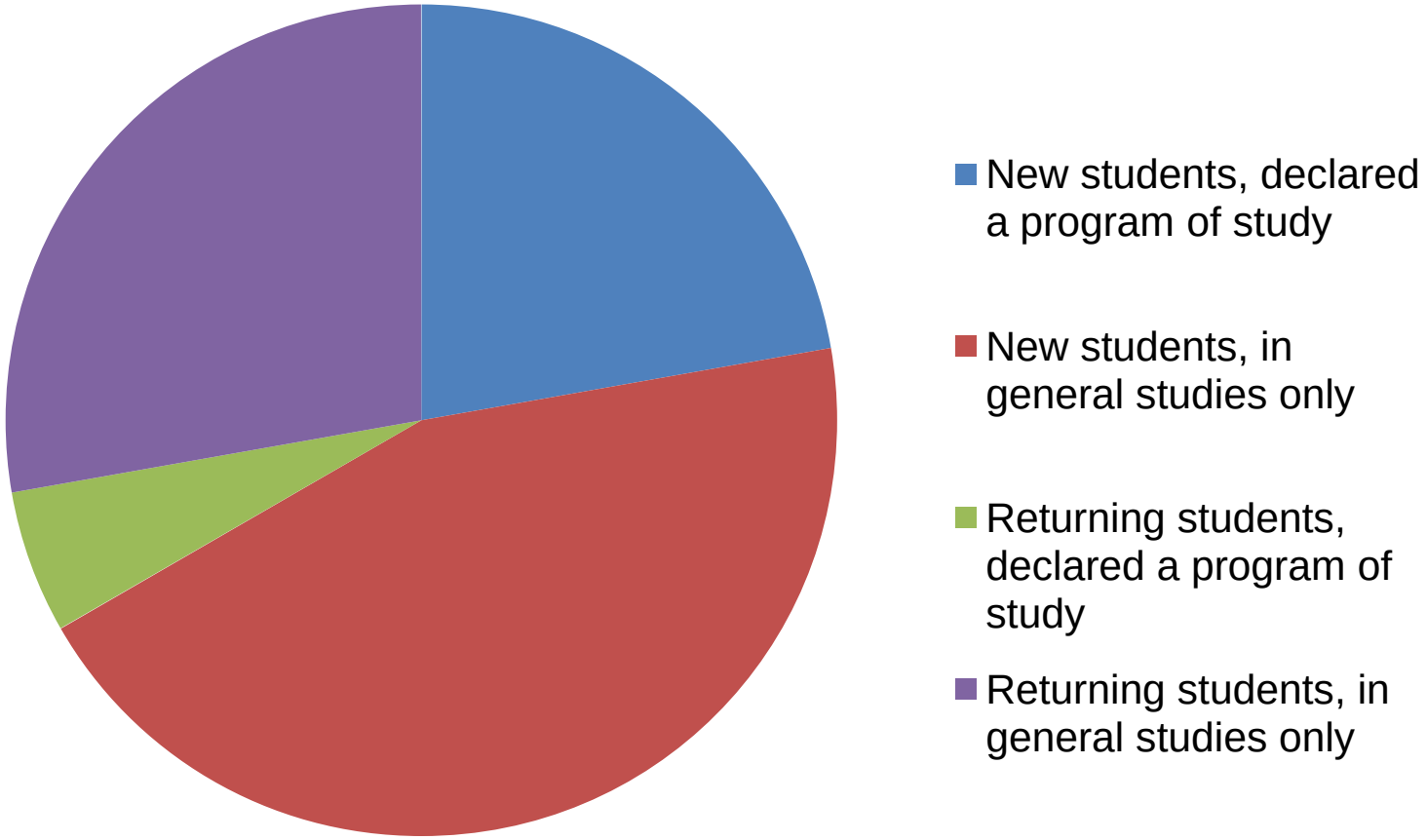
Hypothetical Types of Students



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Common Comparison Groups

- Types of comparison groups
  - The same colleges at the same time
  - Different colleges at the same time
  - The same colleges at different times
- Questions for grantees
  - Which type was in your proposal?
  - Is your comparison group right for you?

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The Same Colleges at the Same Time

- Comparison group typically consists of
  - Students who declared a program of study only
    - Unclear if students in general studies should be in treatment or comparison group
  - Are new students only
    - Returning students in treatment group do not have constant treatment intensity
- Typical distribution of student types
  - Many students who declared a program of study
  - Many new students

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Different Colleges at the Same Time

- Comparison group typically consists of
  - Students who declared a program of study and students in general studies only
  - Are new students only
    - Returning students in treatment group do not have constant treatment intensity
- Typical distribution of student types
  - Few students who declared a program of study
  - Many new students

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The Same Colleges at Different Times

- Comparison group typically consists of
  - Students who declared a program of study and students in general studies only
  - Are new students only
    - Returning students in comparison group may attend school when TAACCCT funds are in use
- Typical distribution of student types
  - Few students who declared a program of study
  - Many new students
  - Few returning students

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Assessing Threats to Internal Validity

	Risk of Selection into Program	Risk of Selection into College	Risk of History Threat
The Same Colleges at the Same Time	X		
Different Colleges at the Same Time		X	
The Same Colleges at Different Times			X

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Propensity Score Matching Methods

- Comparison and treatment groups
  - Should be similar in all ways except the intervention
  - Must be similar in average age and percent male
  - Maybe similar in training program length
- Propensity score matching methods
  - Use weighted averages for comparison group
  - Weights are calculated using statistical methods
  - Minimizes differences in observables
  - Requires a statistical expert

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An Example to Build Intuition

	Treatment Group	Other Group 1	Other Group 2	Comparison Group
Average Age	40	30	60	40
Percent Male	50	40	70	50
Training Program Length	1 year	0.75 year	1.5 year	1 year
Weight		2/3	1/3	

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Picking Cohorts for Each Group

- Grant period is 3 years (36 months)
  - Year 1 (2012): planning year
  - Year 2 (2013): use TAACCCT funds
  - Year 3 (2014): use TAACCCT funds
- Treatment group can be drawn from year 2 and year 3 cohorts
- Comparison group can be drawn from
  - Year 2 and year 3 cohorts
  - Year 1 cohort and earlier cohorts

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Implicit Grant Period Constraints

- One-year programs in year 3 cohort and two-year programs in year 2 cohort
  - Cannot observe all employment outcomes
  - Cannot get data on all employment outcomes
- Two-year programs in year 3 cohort
  - Cannot observe any outcome
  - Cannot get data on any outcome
- Exclude these cohorts in Table 2

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Summary

- Comparison and treatment groups
  - Similar in all ways except for the intervention
  - Depends on the intervention and your students
- Can use propensity score matching methods
  - Comparison and treatment groups will be similar
  - Requires a statistical expert
- Need to pick cohorts for each group
  - Depends on your comparison group
  - Account for grant period constraints

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APPENDIX D.V

DEALING WITH VARIATION IN TREATMENT

This appendix section presents the PowerPoint slides from a presentation on constructing comparison groups when the treatments (for example, programs of study) differ. The presentation was given at a TAACCCT Evaluation & Measurement Convening on August 7 and 8, 2012. The convening was sponsored by BMGF and hosted by Mathematica and CCRC.

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Dealing with Variation in Treatment

Shanna Smith Jaggars
Community College Research Center

TAACCCT Evaluation and Measurement Convening
August 7 and 8, Chicago, Illinois

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Overview

- How do you define a comparison group when treatment varies across sites or fields of study?
- The example of I-BEST
  - Variations across programs
  - How we choose a comparison group
- Incorporating implementation data

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The example of I-BEST

- Washington State wanted to increase adult basic skills students' entry & success in college
- I-BEST "treatment":
  - Combined basic-skills and career-technical education (CTE) instruction allowing students to directly enter college-level coursework
  - 50% overlap in the classroom of basic-skills and CTE instructors
  - Sequence of courses leading directly to credential, in-demand jobs, and further education, if desired
  - College reimbursed at 1.75 FTE (full time equivalents)
- Yet, nature of treatment differs substantially across colleges and different fields of study

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Variations in I-BEST

- Field of study
- Enrollment size
- Number of courses, length of program

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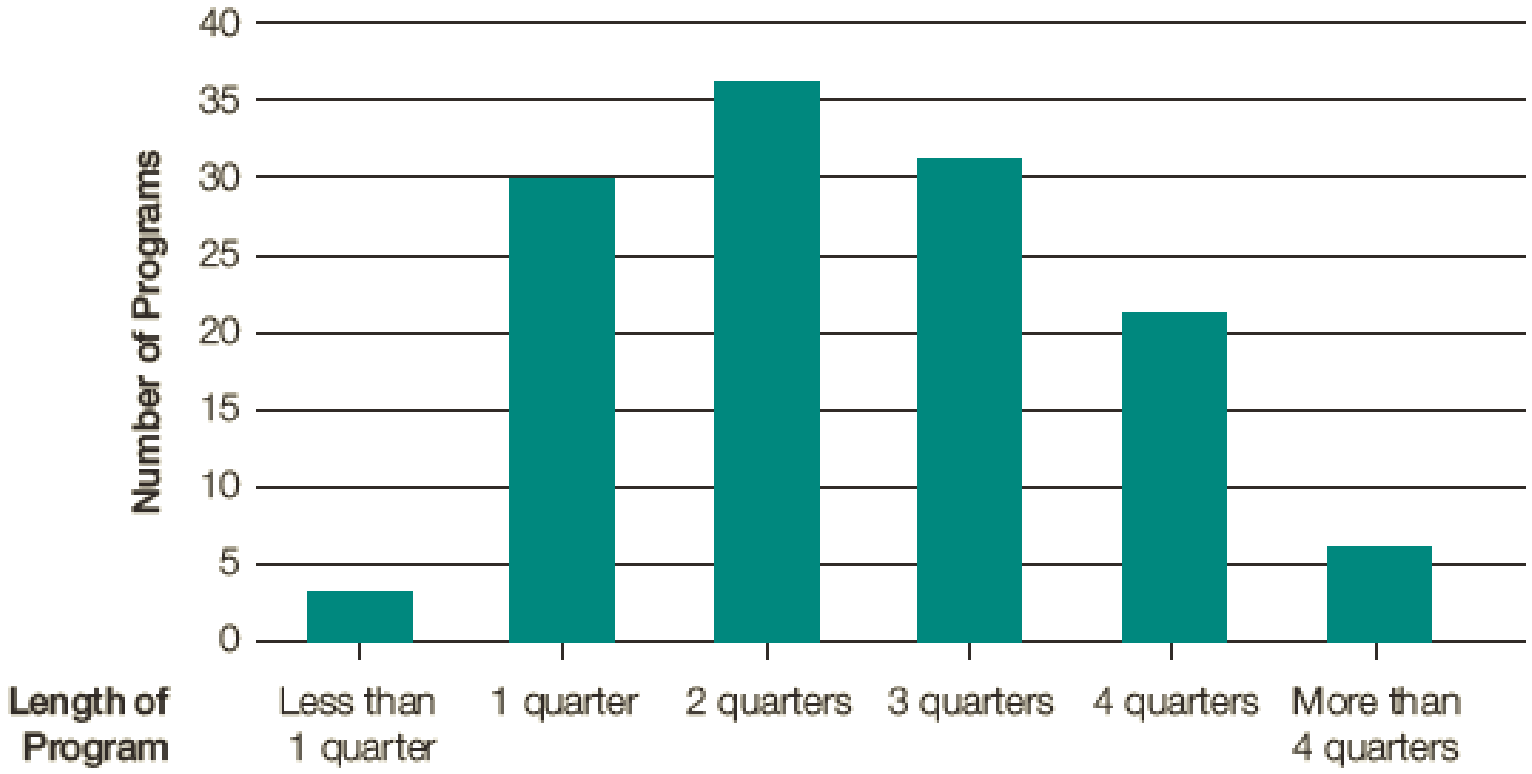
Variations in Program Length



- ***From Wachen, Jenkins, & VanNoy (2010 CCRC Report).***

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Variations in I-BEST

- Field of study
- Enrollment size
- Number of courses, length of program
- Provision of support courses
- Mix of non-I-BEST students within courses
- Amount of integration of basic skills and CTE instruction in the classroom
- Location in administrative structure
- Program funding

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How can you choose a comparison?

- Compare each I-BEST program (Nursing Assistant at College X) to itself pre-I-BEST?
  - Validity problems Russ discussed
- Compare each I-BEST program to a similar non-I-BEST program at another school?
  - Incredibly laborious to find appropriate comparison for each program
  - Most programs will be too small to look at separately

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Study by Zeidenberg, Cho, & Jenkins
(2010 CCRC working paper)

- Used statewide data
- Limited sample to:
  - First-time-in-college students
  - Entered college 2005–2007 (followed to 2009)
  - Basic skills students
  - Taking at least one CTE course
- Compared those enrolled in I-BEST to those not
- Two methods of dealing with background differences:
  - Controlling for differences (regression, PSM)
  - "Difference-in-difference" analysis

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Timing of I-BEST offerings across colleges

	2005–06	2006–07	2007–08
10 Colleges "A"	10	10	10
14 Colleges "B"	0	14	14
10 Colleges "C"	0	0	10

- Possibilities for comparison:
  - Within Colleges B, compare 2005 cohort to 2006 & 2007
  - Within Colleges C, compare 2005 & 2006 cohort to 2007
  - Within year 2005–06, compare A to B & C
  - Within year 2006–07, compare A & B to C

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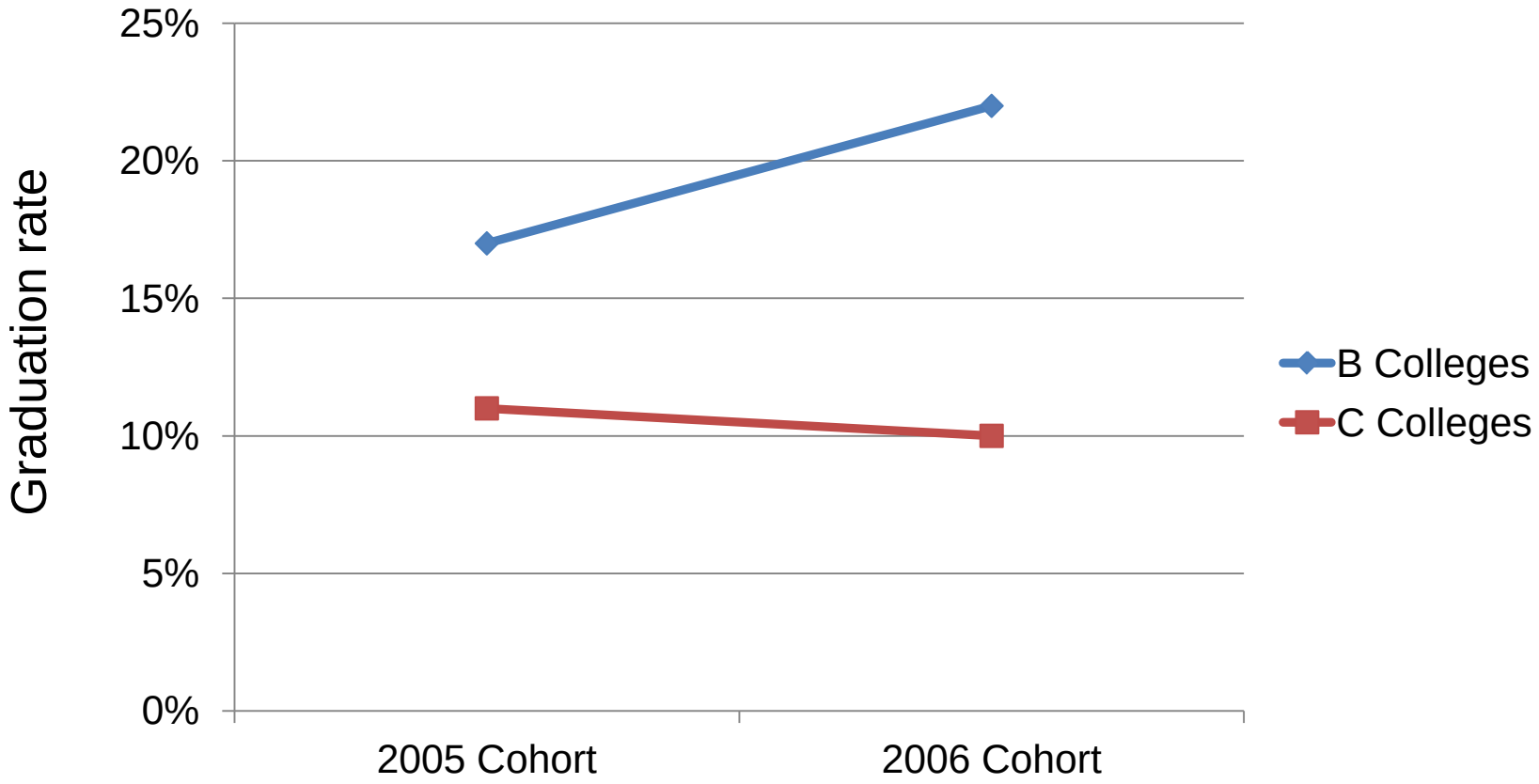
Does introduction of I-BEST coincide with a larger improvement across time?



➢ ***B colleges introduce I-BEST in 2006; C colleges do not.***

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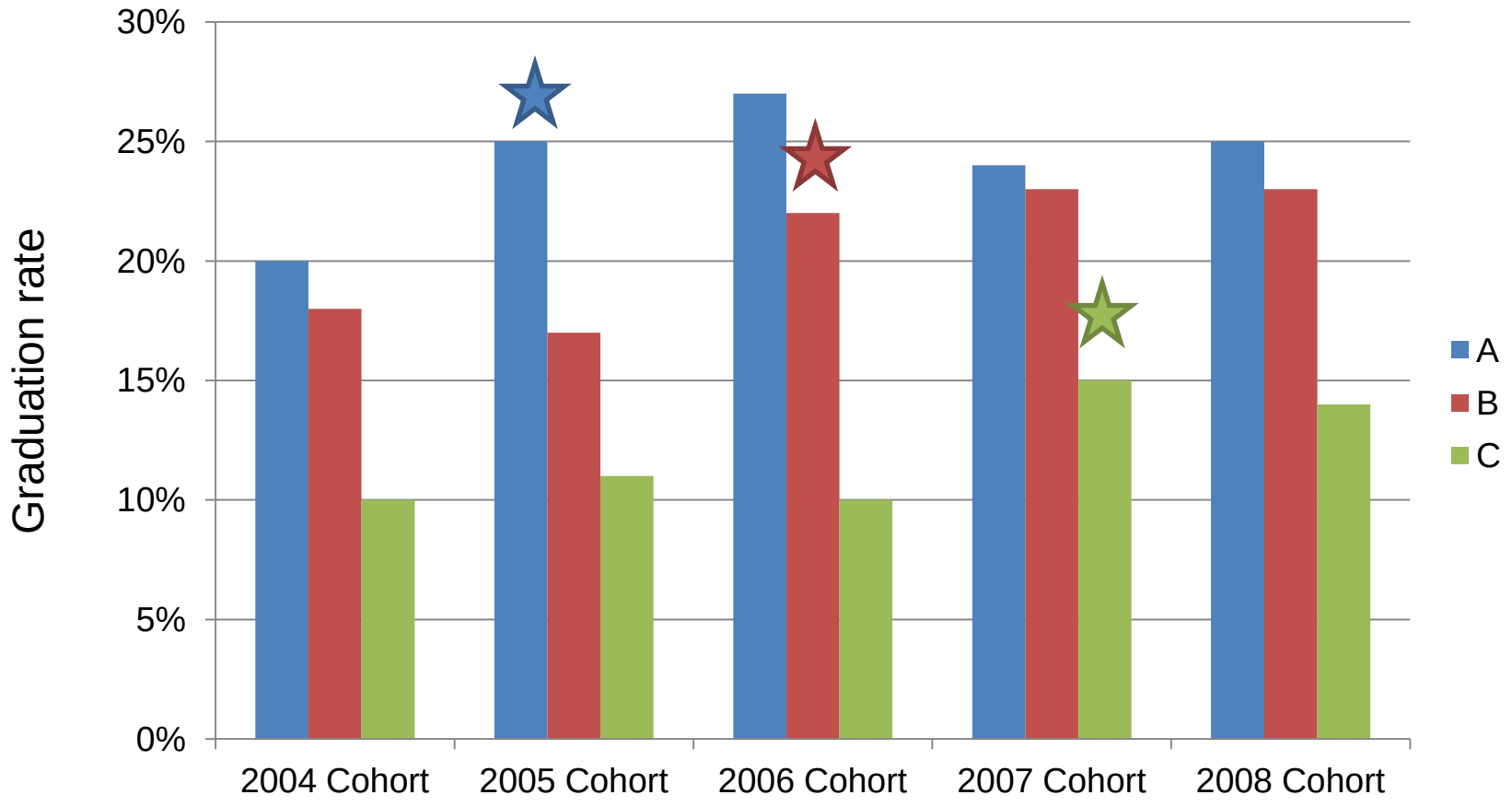
(Made-up example data)



★ = first cohort exposed to program

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Incorporating implementation data

- Do some versions of the program have better outcomes than others?
- Why are some versions more successful?
  - Degree of student supports?
  - Extent of instructional integration?
  - Other factors?

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Incorporating implementation data

- Find ways to measure the suspected key characteristics

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Levels of Integrated Instruction

Based on our observations of I-BEST courses during four site visits and interviews with program administrators and faculty, we developed the following typology of integration to explain the various levels of integrated instruction that exist in I-BEST classrooms.

Model One: Non-Integrated Instruction

The professional-technical instruction is delivered as it normally would be. The basic skills instructor assumes a support role and assists students who are struggling with the professional-technical content.

Model Two: Non-Integrated Instruction with Separate, Contextualized Basic Skills

As in Model One, the professional-technical instruction is delivered as it normally would be with no change in the curriculum. The professional-technical and basic skills instructors jointly identify the basic skills that are needed to succeed in the course, which are then taught separately. The basic skills instructor assumes a support role and focuses on these skills.

Model Three: Partially Integrated Instruction

The professional-technical and basic skills instructors jointly modify the existing professional-technical course to accommodate the needs of basic skills students. The basic skills instructor still assumes a support role, but the course content now includes more focus on basic skills in addition to the professional-technical content.

Model Four: Fully Integrated Instruction

The professional-technical and basic skills instructors work together to revise the content of the existing course more extensively (or, in some cases, to develop a new curriculum) to accommodate basic skills students. The basic skills instruction is interwoven fully into the professional-technical content.

➢ ***From Wachen, Jenkins, & VanNoy (2010 CCRC Report).***

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Incorporating implementation data

- Find ways to measure the suspected characteristics
- Measure them across all (or most/highest-enrollment) programs
- Incorporate them into analysis:
  - Control variables: Does program have independent effect, holding this element constant?
  - Moderator variable: Is the program more effective when it includes this element?

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Takeaways

- State data provide much more flexibility and ease in constructing comparison group
  - Make sure to limit sample to students who are similar to your treatment group
  - Can control for a variety of student characteristics
- Rolling out program to different schools across time can also contribute to more credible comparisons
- Gather common implementation data to understand which variations are most important to success

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