Strengthening Partnerships



About the Publication:

The Office of Community College Research and Leadership (OCCRL) was established in 1989 at the University of Illinois at Urbana–Champaign. The OCCRL is affiliated with the Department of Education Policy, Organization and Leadership in the College of Education. Our mission is to use research and evaluation methods to improve policies, programs, and practices to enhance community college education and transition to and through college for diverse learners at the state, national, and international levels. Projects of this office are supported by the Illinois Community College Board (ICCB), along with other state, federal, and private foundations and not–for–profit organizations. The contents of our publications do not necessarily represent the positions or policies of our sponsors or the University of Illinois. Comments or inquiries about our publications are welcome and should be directed to occrl@illinois.edu. This supplement is part of a series of publications associated with the Pathways to Results initiative that is funded by a grant from the Illinois Community College Board (ICCB Grant Agreement Number 2014–00266).

Acknowledgement:

The OCCRL staff thank the Illinois Community College Board support of the Pathways to Results (PTR) initiative. We also express our thanks to Debra Mills from the Center for Occupational Research and Development (CORD) for conducting the initial research and writing on this project. We would like to thank Debra Bragg for her editing work. Finally, we thank Linda Iliff for her creative contributions to the design and production work on this publication.

Suggested Citation:

Nicholson-Tosh, K., Kirby, C. (2013). *Strengthening partnerships*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.



Background

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

Engagement and Commitment – Partners and team members collaborate to focus on problems relating to program improvement and development needs to improve student outcomes and enhance program quality.

Outcomes and Equity Assessment – Teams use data to examine program needs and student outcomes. Ensuring the success of all students is of paramount importance, so data are disaggregated by specific populations (race, ethnicity, income, veteran and other often underserved populations) to identify gaps in achievement.

Process Assessment – Teams analyze core processes (e.g., advising, teaching, learning assessment, curriculum alignment) that relate to the problem and programs of study they seek to improve.

Process Improvement and Evaluation – Teams reach consensus on solutions for implementation of the improved programs of study and develop plans to evaluate the program's quality over time.

Review and Reflection – Team members, individually and collectively, reflect on lessons learned from engaging in the PTR process. The team develops a plan to sustain the improvements and identifies other equity-impacted problems in the same or additional programs of study that would benefit from the PTR process (Bragg, D., & Bennett, S., 2012).

The PTR process is shown in Figure 1.

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

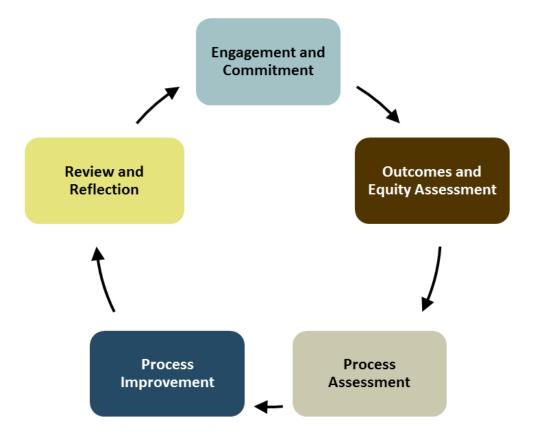


Figure 1. The Pathways to Results process

Additional information about PTR (modules, materials, reports, etc.) is available on the Office of Community College Research and Leadership (OCCRL) website at http://occrl. illinois.edu.

In addition to PTR, another significant effort stimulated by and through partnerships is the Illinois Pathways Initiative (IPI), including the implementation of P-20 (meaning pre-school through grade 20 or beyond) STEM programs of study. This effort ensures students in Illinois are prepared for college and careers as well as completing postsecondary education in greater numbers. Supported by a partnership between the State of Illinois' education and economic development agencies, IPI supports programs of study that empower students to explore and prepare for their academic and career pursuits. IPI also supports new public-private partnerships known as STEM Learning Exchanges that coordinate investments, resources, and planning for these programs. More details can be found on the IPI website at http://www.illinoisworknet.com/vos_portal/STEM/en/Home/. P-20 programs of study that emphasize college and career readiness are at the center of both the IPI and PTR efforts.

Purpose and Goals

The purpose of this module is to assist local institutions and organizations in the development of an effective partnership that promotes and oversees the development and improvement of quality P-20 programs of study. The module is intended to supplement the Engagement and Commitment module for Pathways to Results (PTR), as it details some strategic steps to assist in establishing partnerships.

The specific goals of this module are:

- 1. to assist PTR teams in establishing a partnership mission, partnership goals and outcomes, and identify appropriate partners;
- 2. to provide guidance in establishing a governance structure and an effective operating strategy;
- 3. to suggest ways in which the partnership can evaluate its effectiveness; and
- 4. to suggest strategies that aid a partnership in sustaining its achievements.

Partnerships

Partnerships are foundational to the development and improvement of P-20 programs of study. Identified as a requirement of the Carl D. Perkins Career and Technical Education Act of 2006 (U.S. Department of Education), partnerships are considered essential to effectively provide programming for all students to become college and career ready.

Many benefits are derived from comprehensive partnerships in education. These include: 1) the elimination of duplication in instruction and promotion of smooth transitions from one institution to the next through joint curriculum alignment processes; 2) the provision of multiple individualized supports as dictated by student need; and 3) the focus on student outcomes and shared accountability for student success (Kirby & Nicholson-Tosh, 2012).

According to the report, *Mature Programs of Study: Examining Policy Implementation at the Local Level,* the presence of partnerships signals "multiple stakeholders with good relationships working together to achieve a shared vision of helping students better prepare for college and careers" (Alfeld & Bhattacharya, 2013). Partnerships are a key component to programs of study having a positive effect on high school and college outcomes.

Strong partnerships are fostered when the partnership's mission and goals are kept in sight. Table 1, adapted from C-PAL.net, identifies some of the most common mistakes made in forming partnerships (Adler, Turner, & Towner, n.d.).

Table 1. Common Mistakes in Partnerships

Common Mistakes in Partnerships	Common Mistakes by Education Entities in Partnerships		
 Not having a convener or organizer Not convening employers early in the process Not stating the Return on Investment, stakeholders should understand how results from partnership programs can benefit businesses, individuals, and the economy Making the partnership the goal; there needs to be specific and shared goals, objectives and timelines Not targeting an industry sector(s); Not doing a gap analysis by crosswalking programs with industry needs Not using data; messages need to be compelling and grounded in data. Businesses respond to reliable data, clearly explained Not letting ALL speak; encourage champions because peer-to-peer communication is very important 	 Not identifying the talent pool that education brings to the table Not being simple and straightforward; Employers want to know, in concrete terms, how education can benefit their businesses, their employees, and the economy Overuse of educational terms that employers and other stakeholders do not understand Focusing on what education is already doing or programs that are established; education should not attempt to promote existing programs to the exclusion of new ones but should be sensitive to employers' emerging needs Not using data; Partnership messages need to be compelling and grounded in data. Businesses respond to reliable data even when it shows things are not working 		

Forming a Partnership: Steps at a Glance

Step 1: Set partnership goals and outcomes

Step 2: Identify partners

Step 3: Define the governance structure for the partnership

Step 4: Identify an effective operating strategy

Step 5: Evaluate the partnership

Step 6: Determine how the partnership can/should be sustained

Step 1: Set Goals and Outcomes

Step 2: Identify Partners

Step 3:
Define the
Governance
Structure

Step 4:
Identify
Effective
Operating
Strategy

Step 5:
Evaluate
the
Partnership

Step 6:Determine
Sustainability

Detailed Steps

Step 1: Set Partnership Goals and Outcomes – During this step, leaders in the key institutions identify a mission and attainable goals and outcomes for a partnership. This may be done as a natural evolution of an existing partnership or a result of a new configuration of people who face a challenge or problem that needs to be addressed.

The partnership mission may focus on the alignment of various institutional missions and goals or the braiding of local and regional resources. The mission communicates the purpose of the partnership, why it is important, and a long-term purpose. A sample mission statement might be:

"The --- Partnership generates ideas and leverages resources to develop and implement high-quality educational pathways that lead all students to employment and a career."

Partnership goals and objectives are then developed that are reflective of the mission and are measurable. Goals should be written concisely, be broad in scope, directly related to the mission statement, and cover a long period of time (Kirby & Nicholson-Tosh, 2012). In contrast, objectives are longer, more descriptive statements, narrow in scope, more loosely related to the mission statement, and cover a shorter time period.

Step 2: Identify Partners — During this step, it is important to identify a core team that can get the partnership started. The core team considers other partnerships and structures that exist and determines the need for representation from these groups and if there will be a need to have a representative from the new partnership to join an existing committee. This cross—representation facilitates communication and coordination between the partnership and other structures. If there is a lead entity for the partnership, consideration is given to the most appropriate representative(s) from this entity. Appendix A provides a template for the identification of other groups.

Groups to consider for representation in the partnership for programs of study can be seen in Table 2.

Table 2. Partnership Representatives

K-12 Education

- High schools
- Technical centers

Adult Education

- Adult ed programs at community colleges
- Secondary adult basic education

Community College

• Career services; Adult ed; Occupational programs; Developmental ed; Continuing ed; Workforce development; Customized training; Financial aid

Employers

- Employers
- Chambers of commerce
- Economic development corporations
- Labor associations

Community-based Organizations

- Social service agencies
- Faith-based organizations

Workforce Entities

- P-12 councils
- Workforce boards
- One-Stop centers

When determining partnership representatives it is important to pick the *right* person, not to pick the person who is most liked. In other words, select the individual that will most readily have the information needed by the partnership and be most willing to commit and work for the benefit of the partnership. Appendix B provides a template for the identification of Partnership members (Small biz Bee, 2009).

Step 3: Define the Governance Structure — Governance describes the leadership, decision—making structure, processes, and accountability that determines how the partnership will get work completed. Determining the governance structure for a partnership needs to address a number of questions. Some of these include: 1) How will the partnership interact with other local, regional and state structures that relate to career clusters, pathways, and programs of study? 2) Because programs of study (by definition) include secondary and postsecondary content, how will each secondary school in a region or postsecondary district be represented in the partnership and be kept informed? 3) How will 4—year postsecondary institutions be included? 4) Will an executive committee or a core team be necessary for the effective and efficient operation of the partnership?, and 5) What roles will each individual/entity play as a member of the partnership?

The identification of roles and responsibilities of each member occurs during this step. Providing fiscal, logistical, and knowledge capital are all roles that various partners will play. Small biz Bee identifies this as a key step in effective partnerships (2009). Clear, concise descriptions of what each entity/partner is to do or facilitate can avoid misunderstandings regarding a partner's performance. A list of possible roles those members of participating entities could play is shown in Table 3.

Table 3. Roles of Member Entities

K-12 Education	College and career readiness standards; Course sequences; Contextual teaching; Career development system; Dual credit
Adult Education	Program design; Curriculum development; Bridge programs; Techniques for teaching lower-skill adults; Basic literacy, math, and computer skills; ESL; Assessment tools
State or Community Colleges	Linkages between credit and non-credit; Chunking and modularizing of program; Articulation agreements to promote portability; Support services; Financial aid
Employers	Identify occupations (demand and emerging); Identify skill sets (essential, workplace, foundation, soft skills, employability); Curriculum development; Internships and project-based learning; Mentors; Employment; Career ladder information; Funding (tuition reimbursement)
Community-based Organizations	Referrals and recruitment; Support services; Marketing; Case management; Financial assistance (e.g., food stamps, dependent care, transportation)
Workforce Entities	Labor market information; Economic and workforce trend analysis; Identify target industries; Resource development and allocation; Employer engagement; skills assessments; Job search assistance; Job placement; Policy development

Chairperson

The chairperson:

- presides at meetings;
- calls meetings;
- appoints necessary sub-committees; and
- represents the advisory committee in other groups.

The chairperson creates and maintains a cohesive, effective group, and creates an environment that is conducive to positive committee action.

Secretary

The secretary oversees the administrative functions of the committee.

Figure 2. Officer and Staff Roles

Staff Support

To achieve its purpose in a timely fashion, an advisory committee needs adequate administrative and clerical staffing. Staff support typically records meeting minutes and performs clerical duties, as needed.

A template for the identification of individual roles for each partner organization can be found in Appendix C.

Another decision to be made during this phase of the partnership development process is determining what officers are needed to operate the partnership. Will a permanent chairperson, secretary, and/or staff support person be identified, or will some of these duties rotate from one institution or partnership member to another? Additionally, the length of terms for each member and each officer needs to be determined at this time. Figure 2 identifies some possible officer roles and responsibilities. Appendix D provides a template for use in identifying and documenting partnership officers and staff.

Overall, some flexibility is encouraged in the identification of partnership members. As new issues are addressed, it may be necessary to add individuals or to establish an ad hoc structure to facilitate obtaining the information needed to make good decisions.

Step 4: Identify an Effective Operating Strategy – The operation of a partnership is focused on ongoing communication among members and member entities, meeting planning and logistics, and the ground rules to which all partners agree and follow.

Effective meetings are held at times and locations that are accommodating to the partners. They should begin and end on time and members should be encouraged to stay on task and to allow for full and open discussion of issues, including controversial ones.

"The number one killer of partnerships is lack of communication. When you pick a . . . partner, make sure you feel that person is someone you can communicate openly and honestly with. If there are barriers to your communication your chance of success is not likely." (Small biz Bee, 2009)

Communication with members should occur in both formal and informal settings. Committees should strive to streamline formal face-to-face meetings as much as possible. Unproductive meetings caused by disengaged partners and lead to the loss of members. Providing materials for review in advance, either by e-mail, postal mail, or other digital technologies, can help ensure that meeting time is reserved for communication among members that requires interactive discussions and decision-making. Tours and lectures may not be a productive use of time during regular meetings.

Meeting discussions should focus on the agenda and every attempt should be made to involve each member. Time should be allowed for open discussion on the strengths and weaknesses of the career cluster, pathway, or program of study. The committee chair should be able to draw on the expertise of individual committee members and not let any one member dominate the discussion. This can be aided by establishing ground rules at the beginning of the partnership.

Though each partnership should establish its ground rules based on members' suggestions, ground rules often include items such as the following:

- 1. Encourage everyone to participate equally.
- 2. Share ideas freely.
- 3. Provide constructive suggestions rather than negative criticisms.
- 4. Start on time, stay on track, and end on time.
- 5. Be concise.
- 6. Avoid sidebar conversations.

Appendix E provides a template for documenting the partnership's ground rules.

Each partnership should decide the frequency of meetings, what time to meet, how long to meet, where to meet, and if the use of technology for meeting remotely is viable. Meetings should not be used for dissemination of information but for rich and comprehensive discussion of the issues at hand. Technology can be used for disseminating information prior to the meeting.

Early planning to develop a meeting schedule for the year is helpful before participants' schedules are full. The team leader should send a meeting reminder one month ahead of the meeting. One to two weeks ahead of the meeting, the team leader should disseminate an agenda and logistical information regarding location, etc. to the partnership members as well as other interested parties with a reminder forwarded a few days before the actual meeting. Appendices F and G provide sample templates for meeting preparation and meeting minutes. Appendix H provides a template for the purpose of evaluating the technology that can be used for partnership meetings and information dissemination in advance of the meetings.

Step 5: Evaluate the Partnership — This step returns the team to a review of the goals and objectives for the partnership that were developed in the first component of this module to answer two questions: 1) How will the team know when the Partnership has been successful? and 2) How will the team assess the goals? Revisiting each goal and objective and locating the data that can inform the partnership successes is ongoing and allows the team to identify the need for changes or modifications in the partnership processes.

Pathways to Results, as described in the Background segment on page 1 of this module, provides a process for evaluating and identifying needed improvements in programs of study. Appendix I provides a template for the identification of each goal or outcome to be measured and identifies the data collection method to be used, its advantages and disadvantages.

According to the website, Small biz Bee.com, "There needs to be consistent and systematic review of how the partnership is operating. At least once a year members should go over what is working well, where there are opportunities, and what needs improvement...not only with the business, but between the relationships of the partners as well." (2009).

The article also cautions that partnerships should not fear a restructure if the evaluation suggests it is needed. Restructuring can be in the form of a change in partner roles of or the addition of new partners. Again, keeping the partnership alive and flexible to address the needs of programs of study, the changing labor market, and the needs of individual students for college and career success are foundational to the partnership's success. (Small biz Bee, 2009)

Step 6: Determine Sustainability — During this step, a memorandum of understanding, or Charter, is developed that establishes a written commitment for partnership entities to work together and take responsibility for the development or improvement of the identified cluster, pathway and/or programs of study. The value of this level of formality in sustaining the partnership places the responsibility of commitment on the institutions represented, not on the individuals sitting at the table.

Key elements that need to be established in a formal memorandum of understanding follow.

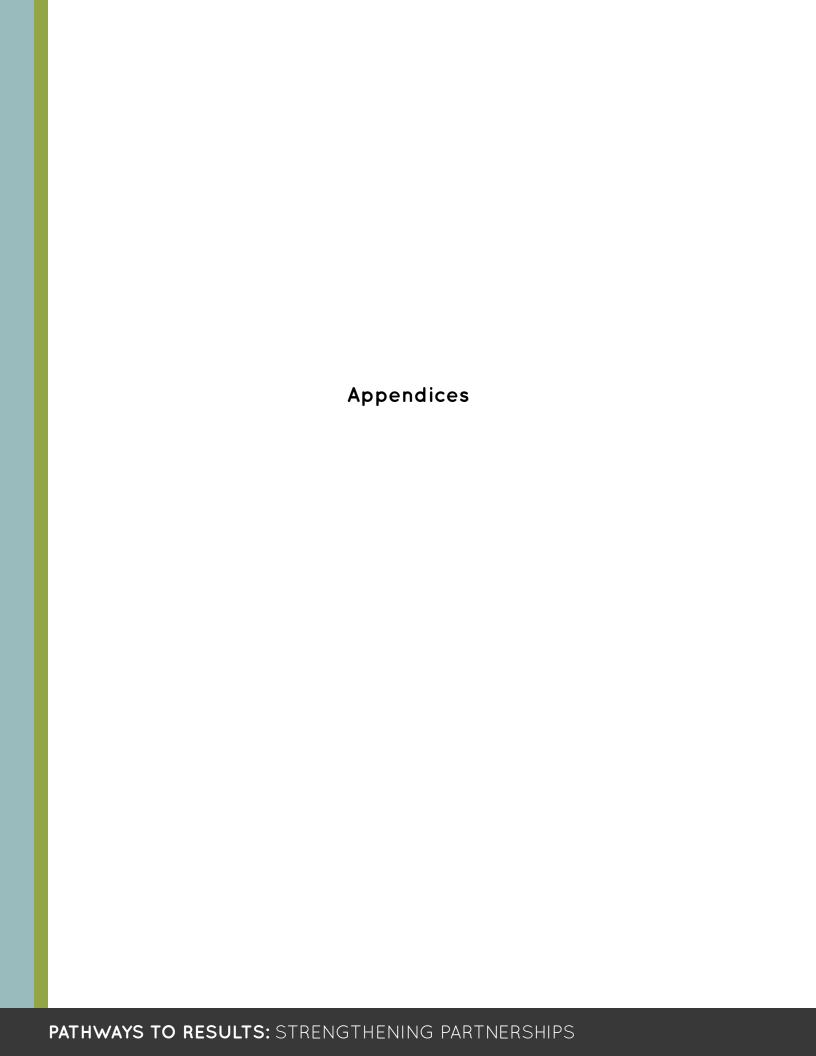
- Name of partnership
- Mission
- Organization and governance
- Membership of council: Vacancies; Time and date; Attendance; Roles and responsibilities
- Executive Committee: Designation and vacancies; Term and time of election; Duties
- Chairperson: Designation and vacancies; Term and time of election; Duties
- Local programs of study partnership manager: Duties
- Terms and time during the year when elections will be held
- Meetings: Annual meetings; Regular meetings; Special meetings; Notice of meetings; Quorum
- Task committees
- Accountability
- Dissolution and amendments

Related to the *Engagement and Commitment component* of Pathways to Results, this memorandum of understanding may or may not reflect the same components as the Charter described in that module. For entities that have worked with the PTR process, the Charter would serve as this commitment document. Embellishment to the components in the PTR Charter is a decision of the local or regional partnership (Nicholson-Tosh, Bragg, & Taylor, 2012). A Charter template may be found on this linked page http://occrl.illinois.edu/projects/pathways/ptr-phase-one-engagement-and-commitment/.

The value of strong partnerships as a foundation to programs of study at the secondary and postsecondary levels cannot be overstated. With the "right" entities represented and the "right" people at the table, partnerships have the potential to address a multitude of issues, including alignment within and between institutions; program improvement; curricular and instructional change; academic and student service support; professional development; and shared resources and sustainability, to name a few. Through the sharing of multiple perspectives and rich discussion, the eventual solutions or strategies gain credibility and momentum toward implementation.

References

- Adler, S., Turner, R., Towner, C. (n.d.). *Community partnerships for adult learning.* Retrieved from www.C-Pal.net
- Alfeld, C., & Bhattacharya, S. (2013). *Mature programs of study: Examining policy implementation at the local level.* Louisville, KY: National Research Center for Career and Technical Education, University of Louisville.
- Bragg, D., & Bennett, S. (2012). *Introduction to pathways to results*. (Rev. ed.). Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.
- Flesher, J. & Bragg, D. (2013). *Evaluation and benchmarking module.* Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana–Champaign.
- Harmon, T., Liss, L., Umbricht, M., & Flesher, J. (2012). *Process improvement and evaluation*. (Rev. ed). Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.
- Hull, D., & Hinckley, R. (2007). Adult career pathways: Providing a second chance in public education. *CORD communications*. Retrieved from www.cord.org/uploadedfiles/ACP-excerpt.pdf
- Illinois Pathways (2006). *Illinois pathways initiative*. Retrieved from http://www.illinoisworknet.com/vos_portal/STEM/en/Home/
- Kirby, C., & Nicholson-Tosh, K. (2012). *Partnership workshop*. (PowerPoint). Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. Retrieved from http://tinyurl.com/npje8of
- National Career Pathways Network (2013). NCPN website. Retrieved from https://www.ncpn.info/index.php
- Nicholson-Tosh, K., Bragg, D. D., & Taylor, J. L. (2012). *Engagement and commitment* (Rev. ed.). Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.
- Small biz Bee. (2009). 7 steps to effective partnerships. Retrieved from http://smallbizbee. com/index/2009/01/13/7-steps-effective-partnerships/
- U.S. Department of Education. (2006). *Carl D. Perkins career and technical education act of 2006 (Public law 109–270)*. Retrieved from http://www.gpo.gov/fdsys/pkg/BILLS-109s250enr/pdf/BILLS-109s250enr.pdf



Appendix A

Partner Connections to Existing Committees Representative on Another Our Partnership Committee that serves our Representative on Another Committee Partnership Committee or Entity Y/N or Name of Y/N or Name of Representative Representative N/A N/A

Appendix B

Partners to Include					
Agency or Entity	Name of Representative(s)	Contact Information			
K-12 Education System: High schools, Technical centers, other					
Adult Education: AE program	s at CC; Secondary ABE; Ind	ividual ABE providers			

Appendix B (continued)

Partners to Include					
Agency or Entity	Name of Representative(s)	Contact Information			
Community Colleges (and Universities): Career services; Adult basic ed; Occupational programs; Developmental ed; Continuing ed; Workforce development; Customized training; Financial aid					
Employers: Employers; Chaml Labor associations	pers of commerce; Economic	development corporations;			
Other volunteer agencies	ations: Social service agenc	ies; Faith-based organizations;			
Workforce Entities: P-20 councils; Workforce boards; One-stop centers					
Others to Include:					

Appendix C

Specific Agency Roles & Responsibilities				
Agency or Entity	Specific Role			
K-12 Education System: Hi	gh schools, Technical centers, etc.			
Adult Education: AE program	ns at CC; Secondary ABE; Individual ABE providers			
	Iniversities) : Career services; Adult basic ed; Occupational Continuing ed; Workforce development; Customized			
Employers : Employers; Cham Labor associations	bers of commerce; Economic development corporations;			
Community-Based Organizations : Social service agencies; Faith-based organizations; Other volunteer agencies				
Workforce Entities: P-20 C	ouncils; Workforce boards; One-stop centers			

Appendix D

Structure of the Partnership					
Committee Officers	Purpose	√ Yes— this will be part of our structure	Name		
Chairperson	Presides at meetings, calls meetings, appoints subcommittees				
Co-Chairperson	Assists the chairperson				
Secretary	Oversees administration functions of the committee				
Staff Support	Clerical staffing				
Other:					

Appendix E

Ground Rules	Ground Rules for Meetings
Ground Rule #1	
Ground Rule #2	
Ground Rule #3	
Ground Rule #4	
Ground Rule #5	

Appendix F

Checklist for Meeting Logistics					
	Deadline	Person Responsible	✓	Method or Technology	Notes
Schedule meeting date, time, and location					
Send out "Mark the Date" notice					
Develope agenda					
Send letter to expected participant list to confirm attendance, distribute agenda, and provide directions to meeting.					
Send reminder notice					
Order room set up & technology					
Order refreshments					
Review set-up checklist to ensure all items are taken care of					
Conduct phone follow-up invitation to maximize attendance					
Conduct electronic recording of meeting for distribution to nonattending members, if members agree					
Send thank-you/follow-up letters to participants and non- participants					
Send meeting notes out					
Distribute press release if appropriate					

Appendix G

Template for Minutes			
Date, time, and location of meeting:			
Members present:			
Members absent:			
riellibers absent.			
Others present:			
Call to order:			
Previous minutes approved:			
Motion by:			
Second by:			
Unfinished business:			
New business:			
THEW DUSTITESS.			
Adjournment:	Secretary:		

Appendix H

How Could Our Partnership Use Technology? **√**Will Examples of how we Which service will **Technology** we use would use this we use? this? Blogs Collaborating and file sharing Groups and lists/e-mail Meeting schedulers Online surveys and registrations Podcasting RSS news feeds Social networks Teleconference Text messaging Video sharing Web/Videoconferencing Website Wikis Other

Appendix I

Evaluation

Use this tool in combination with the Evaluation and Benchmarking Module (Flesher & Bragg, 2013).

What is being measured?	Data collection method	Advantages	Disadvantages
E.g.: Student retention issues	Survey sent to students who dropped out of the program	Can possibly find out contributing factors as to why the student left; can inform process changes	Labor-intensive; may not have contact information for past students

Improvement Objective: Describe the improvement objective that will be evaluated.

Measurement: Describe the measures. Are data available for these measures currently? Is there a baseline?

Expected Results: What level of change does the team consider to be a promising indicator of the desired change?

Data Collection Requirements: What data must be collected to evaluate the results for this improvement objective?

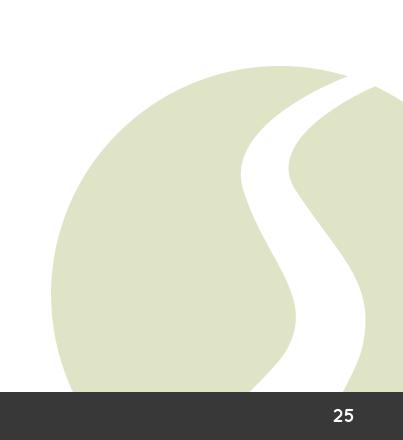
Evaluating the Contribution of the Solutions: How will the team evaluate the extent to which the changes are related to the solutions, rather than other factors?

Improvement Objective: Describe the improvement objective that will be evaluated. Complete this tool for each such objective.

Evaluation Measure: List the measures that were used to evaluate progress on the objective.

Results: Describe the results for each measure, based on the data collection steps.

Evaluation: Do the results for the measure meet the objectives or expectations of the team?





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