IMPLEMENTING PRIOR LEARNING ASSESSMENT TO PROMOTE ADULT COLLEGE COMPLETION

by

ASHLEY Y. LAYNE

(Under the Direction of Karen E. Watkins)

ABSTRACT

This action research case study explored how community college leaders implemented strategies to effectively diffuse prior learning assessment (PLA) practices to promote adult college completion. The three research questions guiding this study were (1) How do community college leaders effectively diffuse prior learning assessment (PLA) strategies to promote adult college completion? (2) What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of PLA practices in community colleges? (3) How do an external diffusion group and lead researcher support fidelity of PLA implementation in an action research study? Through case study action research design and methodology, the researcher collaborated with six community college leaders to co-create a series interventions to support PLA implementation. The interventions are based on best practices of PLA implementation, with activities focused on three key areas, (1) faculty and staff engagement and development; (2) student outreach and support, and (3) infrastructure, policies and processes. Data from participants were gathered from action research team meetings, researcher observations, and critical incident interviews. This study used Rogers' (2003) diffusion of innovations theory to better understand campus-based PLA implementation. Findings show that community college leaders effectively diffuse PLA strategies by (1) engaging cross-functional stakeholders; (2) disseminating knowledge

to solidify institutionalization; (3) aligning the innovation to the college's mission and vision; and (4) by implementing more structure and simplifying processes. Moreover, shared leadership enables fidelity of implementation of an action research study. Conclusions drawn from this study suggest that a diffusion of innovation model aids in the implementation of PLA**.** Additionally, creating a reflective, supportive and consistent holding space supported successful PLA implementation in this study.

INDEX WORDS: Prior learning assessment (PLA), community colleges, action research, diffusion of innovation, adult learners

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ASHLEY Y. LAYNE

B.A., Spelman College, 2003

M.B.A., University of Phoenix, 2005

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by

ASHLEY Y. LAYNE

Major Professor:	Karen Watkins
Committee:	Lorilee R. Sandmann Aliki Nicolaides

Electronic Version Approved:

Suzanne Barbour
Dean of the Graduate School
The University of Georgia
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DEDICATION

I dedicate this dissertation to those who hold a special place in my heart and have supported me to make this dissertation possible.

To my husband, Derek; your love, patience, and understanding motivate me to strive for excellence.

To my daughter, London, my shining star; you inspire me each and every moment to be a better woman.

To my mother, Willie Mae Brookins; your unwavering love and support have been the wind beneath my wings.

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To my beloved family and friends; who remind me that the sky is the limit.

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I can do all things through Christ who strengthens me.

–Philippians 4:13

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CHAPTER 1

INTRODUCTION

How can adult learners in higher education take advantage of educational pathways to fill high-demand occupations? Community colleges are challenged with reevaluating and envisioning degree completion strategies including shortening time to degree. By 2018, the United States will need 22 million new workers with college degrees, but projected graduation rates will fall short by at least 3 million (Carevale, Smith, & Stohl, 2013). The purpose of this action research case study was to explore how community college leaders implement strategies to effectively diffuse prior learning assessment (PLA) practices to promote adult college completion.

PLA is a set of well established, researched, and validated methods for assessing non-collegiate learning for college credit (Klein-Collins, 2011). Research shows that PLA is a recommended best practice that positively impacts adult college completion goals to meet workforce development needs (Klein-Collins & Wertheim, 2013). Moreover, research shows the positive impact PLA can have on encouraging degree completion to support workforce needs for adult learners. The average adult learner is characterized as 25 and older (Kasworm, 2010). Improved adult college completion rates is critical to the continued competitiveness of the United States. Kasworm (2010) states, "recent national discourse has focused the importance of a more diversified undergraduate student population, including adult learners, for the future viability of our nation" (p. 144).

America cannot lead in the 21st century unless we have the best educated, most competitive workforce in the world.

–President Barack Obama

Adult College Completion and Workforce Development

Adult college completion is a pathway to help fulfill workforce development needs. The United States is ranked 9th in the world in college completion among adult learners ages 25-34 (Kanter et al., 2011). Tens of millions more students and adults will be less able to qualify for higher paying jobs unless they are able to matriculate through college and graduate (Kirsch et al., 2007). Moreover, between 30 and 35 million Americans have enrolled in college, yet never completed a degree or certificate that would enhance the competitiveness of the United States economy (Erisman & Steele, 2015). Implications for meeting this need are found by examining workforce development challenges and exploring how higher education can contribute to closing the United States skills gap. A 2013 report by the Organization for Economic Co-Operation and Development (OECD) states, "in the context of global upskilling and increasing competition for skills in global markets, it is important that the United States take action" (p. 3).

There is a need to increase the number of workers with a college degree in order to successfully compete in a sustainable labor market. Research shows that more than 60% of jobs will require a post-secondary degree by 2020 (Kanter et al., 2011). National surveys of the U.S. adult population indicate that adults do not demonstrate sufficient skills needed to fully participate in an increasingly competitive work environment (Kirsch et al., 2007). Merisotis (2016) states, "two million jobs are unfilled, lacking qualified applicants; three-fourths of CEOs say finding qualified people is a major concern; and two-thirds of all jobs being created today

require some form of post-high school education or training" (para.17). These essential skills include communication, management, teamwork, leadership, and numeracy skills.

The lack of qualified, skilled workers affecting not only workforce development needs, but also changing demographics. Research examining workforce development demographic trends suggests that over the next 25 years workers who have lower levels of education and skill will replace better-educated individuals that leave the workforce (Kirsch et al., 2007). Moreover, the aging of the Baby Boomers suggests that about 8,000 people turn 60 every day, and as this generation leaves the workforce, their positions are being taken by the smaller cohort of less-skilled workers.

Research shows a consistent trend since 2008, of the United States workforce increasing more slowly and, without intervention, is likely to become less educated (National Commission on Adult Literacy, 2008). Kazis et al. (2007) state that the combination of rising skill requirements and changing demographics makes it essential that the nation look to better meet the needs of adult workers for skills and credentials. The National Commission on Adult Literacy (2008) claims, "we should get more adults into postsecondary education if America is to meet its 21st century workforce demands, replace aging workers, and meet national goals of having an educated society" (p. 1).

It is becoming more difficult for higher education institutions to increase degree attainment linked to growing a strong labor market. More emphasis should be focused on implementing adult-friendly practices and policies within community colleges to meet this need. Hayward and Williams (2015) claim that "sizeable increases in adult-learner graduation rates are not likely to be realized in the community college without consideration of the unique needs of adult learners" (p. 52). A presentation by Kanter, Ochoe, Nassif, and Chong (2011) stressed the

importance of connecting higher education, workforce training, career advancement, and civic participation in order to increase effectiveness and leadership capacity as a nation.

To achieve the goal of increased adult college completion rates, colleges should support and implement adult-friendly practices, including PLA, in order to develop coherent policies to address the needs of adult learners. Increased adult participation in higher education represents important beliefs in a college degree that is linked to work, financial support, and life opportunities (Kasworm, 2003). Kirsch, Braun, Yamamoto, and Sum (2007) state, "if our society's overall levels of learning and skill are not increased and the existing gaps are not narrowed, there is little chance that economic opportunities will improve" (p. 3).

A more educated workforce benefits the individual and the economy by promoting systematic and personal growth. Systematic benefits of a more educated workforce include higher rates of employment and better jobs, resulting in increased fiscal contributions to government and increased voter participation. Studies show that people who hold a college degree are more likely to be employed and make a living wage than those who do not (National Center for Education and Statistics, 2014). Benefits of a more educated workforce include increases in personal income and economic well-being, greater likelihood for children to thrive, and better health. Kanter et al. (2011) found that students who at least earn a community college degree will earn 29% more than students with only a high-school degree. These positive benefits support the view that adults should be brought back into the higher education system and be provided pathways that are more likely to lead to degree completion. Condelli , Kirshstein, Silver-Pacuilla, Reder and Wrigley (2007) acknowledge the importance of the Obama Administration's 2020 goal that adults must be involved in higher education in order for the United States to lead the world in college attainment and that accelerating learning for adults is a

key factor toward their sustained motivation, engagement, and ultimate success. However, higher education faces important challenges to realign its mission and environment in support of the adult learner (Kasworm, 2010).

Problem Identification

Higher education and workforce development systems are striving to increase adult college completion goals by trying to reengage adult learners by implementing new practices and policies (McKay, 2012). The community colleges in this study focused on expanding educational pathways for adult learners in order to prepare them for high-skill/high-demand occupations. The colleges that participated in this study are members of a consortium of public higher education institutions specifically focused on preparing students in high-demand fields, including manufacturing. A report conducted by The Manufacturing Institute (2012) and Deloitte Consulting show concerns about employers' ability to fill critical positions that require a college degree. In the report 1,123 manufacturing executives were surveyed and approximately 600,000 jobs nationwide were found to be unfilled due to lack of qualified candidates. Kirsch et al. (2007) findings show that to prosper in this new labor-market environment, individuals should possess the skills, knowledge, flexibility, and credentials that will allow them to compete successfully.

Research shows that one strategy to help adult learners obtain degrees is prior learning assessment (PLA). The American Council on Education (ACE) (2013) defines PLA as academic credit granted for demonstrated college-level equivalencies gained through learning experiences outside of the college classroom. The 2013 OECD report recommends that the United States should strategically pursue more quality in the post-secondary system, recommending that community colleges systematically develop and support PLA as a means of encouraging adults

to return to postsecondary education (Kuczera & Field, 2013). A systematic approach was adopted by the participating colleges in this research study. The colleges strived to implement PLA so that it benefits all students, specifically adult learners, regardless of the discipline.

Despite national goals to improve adult college completion, systematic PLA practices in community colleges are not as effective as they could be. A study by McKay et al., (2012) shows that only 27 percent of institutions reported that academic credit is granted to students for what they have learned through PLA. The researchers found that higher education institutions have unstandardized approaches and policies to assessing prior learning, which may hinder college completion goals (McKay et al., 2012). Brigham and Klein Collins (2010) assert:

> The national imperative to improve postsecondary degree completion has led to various innovations within colleges and universities to improve student retention and academic success, particularly of non-traditional learners. One innovation that has been in use since the 1970s, but is often under-promoted and under-utilized within institutions, is prior learning assessment, or PLA (p.1).

This research study particularly focused on using PLA as an innovative offering at community colleges to encourage the degree completion of adult learners to support workforce development.

Purpose and Research Questions

The purpose of this action research case study was to explore how community college leaders implement strategies to effectively diffuse prior learning assessment (PLA) practices to promote adult college completion. This study used action research and its iterative process of problem-solving, change and interventions, to provide recommendations to the South

Consortium (pseudonym) and to implement and evaluate the planned interventions (Coghlan & Brannick, 2014). The following research questions guided this study:

1. How do community college leaders effectively diffuse prior learning assessment (PLA) strategies to promote adult college completion?
2. What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of PLA practices in community colleges?
3. How do an external diffusion group and lead researcher support fidelity of PLA implementation in an action research study?

Conceptual Framework

Embedded in this study are three areas of focus taken from both theoretical and empirical literature on implementing prior learning assessment in community colleges. As indicated in Figure 1, these three foci include (a) prior learning assessment, (b) adult learners in higher education and (c) the diffusion of innovations theory. This framework serves as the foundation for this action research case study as we looked to provide ideas around how PLA could be implemented with fidelity in community colleges. This framework suggests a unique opportunity for community colleges to strategically use concepts of the diffusion of innovations theory to successfully implement and diffuse PLA practices to improve adult college completion.

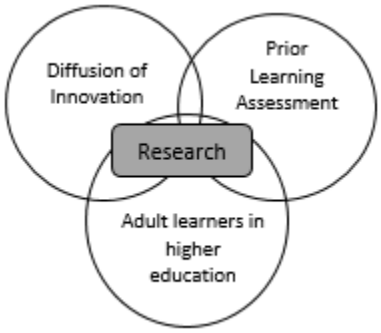

Figure 1. Theoretical framework for this action research case study.

Specifically, this study focused on PLA implementation in community colleges to support adult learners. Figure 2 shows the logic model that guided this study.

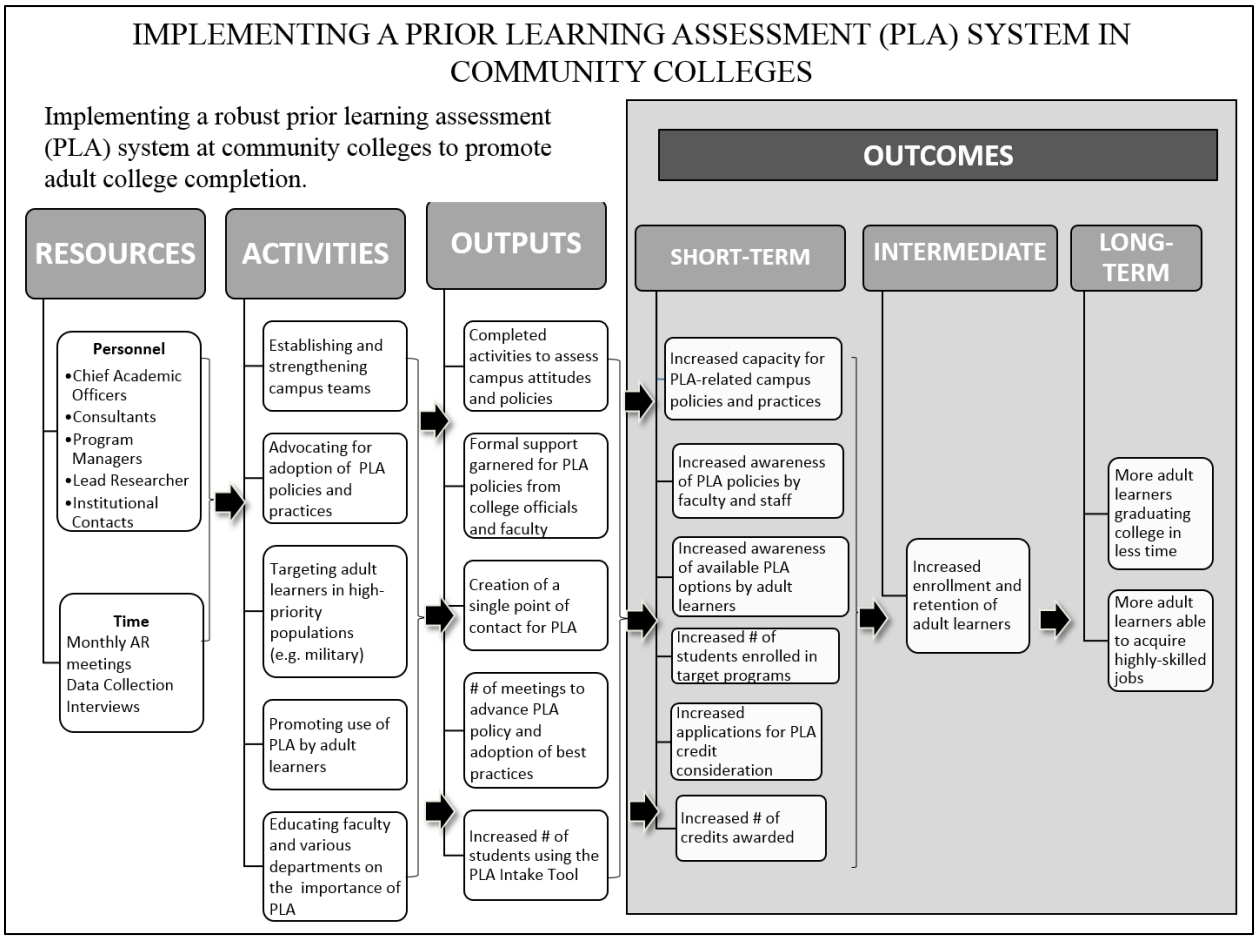

Figure 2. Logic Model for implementing PLA in community colleges.

Theoretical Background

The current study was framed by the concepts of Rogers' (2003) diffusion of innovations theory. Rogers (2003) defines diffusion as the process by which an innovation is communicated through certain channels over time by members of a social system. This theory provides a framework to determine opportunities and obstacles that impact the adoption of PLA policies and implementation. "Every innovation contains an implicit theory of how people learn" (Elias,

Zins, Graczyk, & Weissberg, 2003, p. 310). Rogers (2003) defines innovation as an idea, practice, or object that is perceived as new by an individual or organization. Diffusion of innovations theory can help community college leaders understand strategies necessary to attract adult learners to complete college.

Study Significance

The significance of this study was (a) the use of a theoretical framework—to understand how to best diffuse PLA practices in community colleges (b) a focus on connecting adult college completion to workforce development needs—a gap in the research, and (c) the ability to inform practice to disseminate knowledge. The review of the literature suggested that adult learners require specific services to complete college and that institutions offer varying levels of programming and support for this population. Kazis et al. (2007) assert that traditional higher education programs and policies are not well designed for the needs of adult learners and claim that "understanding the unique needs of adult learners is critical to designing higher education systems and policies that support this population and promote their success" (p. 2). Results of this study can be used by peer institutions to develop new PLA policies, procedures, and interventions to better support the college completion of adult learners.

This research adds to the body of knowledge of how leaders at three community colleges worked collaboratively to build and systematically implement a robust PLA system to promote degree completion for adult learners. This study is of value to college administrators, advisors, students, and state policy makers and will inform national and state strategic planning to increase the adoption of PLA policies at community colleges. Examining the strategies three community colleges used to implement PLA has the potential to deepen our understanding of the diffusion of innovations theory within higher education settings. This study considered the influence of

diffusion of innovations theory, and documented its intersection with PLA implementation to support adult college completion.

Organization of the Dissertation

This chapter described the study's underlying foundation through problem identification, purpose and research questions, conceptual framework, theoretical background, and study significance. A brief description of the remaining chapters of the dissertation follows. Chapter 2 provides a review of relevant literature as connected to the study's conceptual framework. Chapter 3 offers a detailed explanation of the research design and methodology. Chapter 4 presents the story of the study through the lens of a single action research case study. Chapter 5 explores findings and recommendations met through the coding of data and resultant analysis. Lastly, Chapter 6 provides a summary of the study, draws conclusions, and offers reflections and recommendations for future areas of inquiry.

CHAPTER 2

LITERATURE REVIEW

This chapter provides the foundation for research on implementing PLA as it relates to adult learners in higher education and college completion. The information is organized to highlight the role that PLA has in degree completion. The literature will explore research that examines the impact of Everett Roger's diffusion of innovations theory. Through this review, colleges will understand the types of PLA and how awarding credit for previous learning experiences can lead to improved enrollment, retention, and graduation rates among adult learners.

The purpose of this action research case study was to explore how community college leaders implement strategies to effectively diffuse prior learning assessment (PLA) practices to promote adult college completion. The following research questions guided this study:

1. How do community college leaders effectively diffuse prior learning assessment (PLA) strategies to promote adult college completion?
2. What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of PLA practices in community colleges?
3. How do an external diffusion group and lead researcher support fidelity of PLA implementation in an action research study?

This chapter explains the theoretical framework for this study and will provide a review of the literature. The literature review is divided into four sections. The first section will examine literature on the diffusion of innovations theory. The next section includes literature on

PLA and its impact on college completion, specifically measuring and examining effective outcomes. The third section will review the role community colleges have in helping to meet national college completion goals and studies focused on offering PLA at these colleges. The last section discusses the lack of institutional practices and policies for adult learners. Each of these key areas play an important role in the significance of understanding how implementing PLA can promote adult college completion to support workforce development needs.

Diffusion of Innovations Theory

Understanding the diffusion of innovations theory will enhance practices to implement PLA to promote adult college completion. Rogers (2003) defines innovation as an idea, practice, or object that is perceived as new by an individual or organization. The diffusion of innovations theory is built on empirical observations that describe transitions of directed change (Rogers, Medina, Rivera, & Wiley, 2005). Diffusion is the spread of messages that are perceived as dealing with new ideas and represent a certain degree of uncertainty to an individual or organization (Rogers, 2003). The four main elements in the diffusion of new ideas are (a) innovation, (b) communication channels, (c) time, and (d) the social system (context).

The spread of innovation depends on perceptions that influence rate of adoption. These perceived attributes are (a) relative advantage, (b) compatibility, (c) complexity, (d) trialability, and (e) observability (Rogers, 2003). These perceived attributes constitute the independent variable, or cause, and the dependent variable, or effect, is the rate of adoption by members of a social system. Banyte and Salickaite (2008) analyzed these attributes and determined that several factors increase the possibility of successful diffusion and adoption including: (1) the benefit of the innovation is clearly visible, (2) the use of the innovation is defined clearly and uncomplicatedly, and (3) there is an easy opportunity to test the innovation. Moreover, the

researchers concluded that innovations should correspond to the norms and values of the existing habits and skills of stakeholders (Bayte & Salickaite, 2008).

Adopter categories

The diffusion of innovations theory suggests that members of a population will vary in their willingness to adopt an innovation (Surry, 2002). The diffusion of innovation model identifies five adopter categories for subunits of the social system, based on their innovativeness. These categories include (1) innovators, (2) early adopters, (3) early majority, (4) later majority, and (5) laggards (Rogers, 2003). The diffusion of innovations theory examines the behavior and the relationships between and amongst categories, and illustrates emergent behavior and characteristics. Table 1 shows how Rogers (2003) characterize the various adopter categories.

Table 1

Diffusion of Innovations Adopter Categories

Category	Key Attribute	Key Characteristics	Percentages of Adopters
Innovators	Venturesome	• Interest in new ideas • Ability to communicate with other innovators • Ability to understand and apply new knowledge • Ability to cope with high degree of uncertainty	2.5%
Early Adopters	Respect	• Large number of opinion leaders • Respected by peers • Integrated into member society • Often looked to as a "role model"	13.5%
Early Majority	Deliberate	• Frequent interaction with peers • Not opinion leaders • Follow with "deliberate willingness" but seldom lead	34%

Category	Key Attribute	Key Characteristics	Percentages of Adopters
Late Majority	Skeptical	• Often adopt due to increased peer pressure • Approach innovation with skepticism • Need innovation to be nearing the norm before adoption	34%
Laggards	Traditional	• Isolated from social networks • No opinion leadership • Have traditional values	16%

The distribution of innovativeness within a population resembles a normal bell curve. The distribution shows the impossibility of having all members of a population adopt an innovation at the same time. Research by Surry (2002) suggests that "change agents should anticipate different responses to their innovations and develop plans for addressing the concerns of all groups, from innovators to laggards" (p. 3). Diffusion of innovations theory shows how the innovation decision process is slowed or accelerated by knowledge, peer and expert persuasion, decisions by leaders, and implementation and confirmation (Lee et al., 2010). As described by Surry (2002) potential adopters have to learn about an innovation and be persuaded to try it out before deciding on whether to adopt or reject the innovation. Moreover, diffusion of innovations theory shows that adoption is not a momentary, irrational act, but an ongoing process that can be studied, facilitated, and supported (Surry, 2002).

Roger's diffusion of innovations theory (2003) is a comprehensive framework for understating the spread of an innovation and its driving factors to accelerate the rate of adoption. The diffusion of innovations theory shows that adoption is not a momentary, irrational act, but an ongoing process that can be studied, facilitated, and supported (Surry, 2002). Rogers (2003) developed the concept of innovation, which is defined an as any object, idea, technology, or

practice that is new. The notion of an innovation's newness may be relative to both place and population. Rogers' approach to innovation helps to effectively dissolve barriers to the adoption of new ideas. The model is generalizable and has wide applicability.

Innovation

Rogers (2003) states "the rate of adoption of an innovation depends on perceptions of the members of the social system, which are influenced by (1) relative advantage, (2) compatibility, (3) complexity, (4) trialability, and (5) observability" (p. 12). Table 2 shows how Rogers (2003) explains the relationships of the attributes to the rate of adoption.

Table 2

Relationship of Attributes to Rate of Adoption

Attribute	Influence	Relationship to Rate of Adoption
Relative Advantage	Degree to which an innovation is seen as advantageous to a current practice	Positive: The greater the perceived relative advantage, the greater the rate of adoption
Compatibility	Degree to which an innovation is seen as compatible to the current needs, culture, and philosophy of the organization	Positive: The greater the perceived compatibility, the greater the rate of adoption
Complexity	Degree to which an innovation is perceived as difficult to adopt and to use by the potential adopters	Negative: The greater the perceived complexity, the weaker the rate of adoption
Trialability	Degree to which an innovation can be tried or experimented with by potential adopters	Positive: The greater the perceived trialability, the greater the rate of adoption
Observability	Degree to which the outcomes of an innovation are observable by potential adopters	Positive: The greater the perceived observability, the greater the rate of adoption

Relative advantage is the degree to which an innovation is perceived as better than the idea it supersedes. To adopt an innovation, there should be an overall benefit of its use. Compatibility with existing values and practices is the degree to which an innovation is perceived as being consistent with the values, past experiences, and needs of potential adopters. Complexity refers to the degree of simplicity and ease of use to which an innovation is perceived. Within complexity, users must also understand why the innovation is beneficial and valuable. Trialability is the degree to which an innovation can be experimented with on a limited basis, including test demonstrations and simulations. This allows potential users to see how the innovation might work without fully committing to adopting it. Observability of results implies that the easier it is for individuals to see the results of an innovation, the more likely it will be adopted. The more visible the success of the innovation, the more likely that adoption is encouraged.

Rogers (2003) claims that from 49 to 87 percent of the variance in the adoption rate of any new innovation is explained by the five attributes mentioned previously. Roger (2003) coined the innovation-decision process, which describes the steps needed in deciding whether to adopt an innovation. The rate of adoption can be affected by other variables, including the type of innovation-decision, the nature of the communication channel diffusing the innovation in the innovation-decision process, and the nature of the social system (Rogers, 2003).

Communication is the process by which participants create and share information with one another in order to reach a mutual understanding. Roger (2003) states that interpersonal channels are more effective in forming and changing attitudes toward a new idea, and in influencing the decision to adopt or reject a new idea. Individuals evaluate an innovation through the subjective evaluations of near-peers who have adopted the innovation.

Time is involved in the diffusion of innovations theory in three ways, including the innovation-decision process, innovativeness, and rate of adoption**.** This process helps to describe how an innovation gets adopted, rejected, or abandoned (Sahin, 2006). The steps of the innovation-decision process include knowledge, persuasion, decision, implementation, and confirmation.

The knowledge stage includes building awareness of the innovation and its applicability to real life (Sahin, 2006). There are three sorts of knowledge: (1) awareness-knowledge (information that an innovation exists); (2) how-to-knowledge (information necessary to use an innovation properly); and (3) principles-knowledge (dealing with the functioning principles underling how the innovation works) (Sahin, 2006). The persuasion stage entails gathering information about the innovation, including costs, features and user reviews, in order to consider whether or not to adopt the innovation. The decision stage involves considering advantages, disadvantages, benefits, and challenges, and the choice is made whether to reject or adopt the innovation. The implementation stage includes integrating the innovation into regular use and evaluating its effectiveness. Also during implementation many modifications or re-inventions occur to the improve usability and usefulness of the innovation (Rogers, 2003). The confirmation stage occurs when there is reinforcement of the decision to adopt or reject an innovation. In summary, the process in information-seeking and information-processing events seeks to obtain initial knowledge about the innovation, form an attitude toward it, decide to adopt or reject it, implement the new idea, and finally to confirm the decision made.

Innovativeness is the degree to which an individual or organization is quicker in adopting new ideas than other members of a social system (Rogers, 2003). The rate of adoption is the speed with which an innovation is adopted by members of a social system. The rate of adoption

is measured as the number of members of the system that adopt the innovation in a given time period. An innovation's rate of adoption is influenced by the five perceived attributes of an innovation.

A social system is a set of interrelated units that are engaged in joint problem-solving to accomplish a common goal (Rogers, 2003). The members or subunits of a social system may be individuals, informal groups, organizations, and/or subsystems. The social system constitutes a boundary within which an innovation diffuses. Norms of a social system are also important in understanding behavior patterns that may affect diffusion. Research on social systems found that opinion leadership can also affect the diffusion of an innovation. Opinion leadership is the degree to which an individual is able to influence attitudes and behaviors of others in a desired way. The diffusion of innovations theory also identifies change agents as integral members of a social system (Rogers, 2003). A change agent is an individual who attempts to influence innovation-decisions in a direction that is deemed desirable by an organization.

There have been many studies that examine the diffusion of innovation in organizations. Research by Frank et al. (2004) shows that organizations that share a common goal are more likely to help others implement the innovation to improve the organization's overall common vision. Research has shown that within educational organizations, it is complicated to make a collective decision to adopt and implement an innovation. Hence, the diffusion of innovation is more likely within educational organizations to allow subunits to make independent decisions in reference to aligning the ideas, information, and social forces that are exposed to the organization's vision (Frank et al., 2004).

Research by Valente (1996) found that learning from the experience of others is demonstrated by the diffusion of innovations among organizations. The study showed that

within the diffusion model, subunits that are not innovators or early adopters turn to others who have prior experience with the innovation to learn more about it (Valente, 1996). Learning from direct experience is supplemented by the diffusion of experience by copying others. Copying others is an adaptive way to deal with uncertainty and ambiguity. Since organizational subunits affect the performance of an organization as a whole, the diffusion of experience helps to explain how subunits learn from the experience of other subunits.

Levitt and March (1988) found that the "possibilities of learning from the experience of others can be understood by looking at the diffusion of innovations among organizations" (p. 330). Research on diffusion of experience suggests that in order for organizations to learn, there must be an understanding of the relationship between experiential learning and organizational networks. Levitt and March (1988) state that organizations copy ideas and practices of each other because of pressures from collective values and ways, and assert that "diffusion increases the amount of experiences from which an organization draws and reduces the chance of vulnerability" (p. 333).

The diffusion of innovation model builds on the experience of early adopters of the innovation in order to transcend the innovation to all. As suggested by the research of Lee et al. (2010) studying the diffusion of 100% tobacco-free college and university policies, the diffusion of innovations theory posits that the adoption of a PLA policy can be accelerated by using the five attributes of innovation: (1) documenting the advantages of the polies/practices, (2) showing the compatibility of the policy/practices with existing campus environments, (3) providing examples to reduce the complexity of adoption implementation, (4) allowing 'trialability' through examples from other campuses' experience, and (5) illustrating the benefits by making effects observable to potential adopters. This study focused on and tracked activities in four

domains: (1) developing and strengthening campus coalitions, (2) advocating for adoption and compliance with campus policies; (3) reaching the initiative to priority populations; and (4) promoting a web-based reporting system, tracking activities and outcomes.

Several studies have been conducted using the diffusion of innovation model in the higher education contexts. Table 3 shows empirical studies that focused on the diffusion of innovation in educational settings.

Table 3

Empirical Research Studies on the Diffusion of Innovations Theory

Author(s)	Purpose	Research Question(s)	Method(s)	Sample
Borrego, Froyd, & Simin Hall (2010)	Recommend actions to promote adoption of engineering education innovations with demonstrated value	How widespread is awareness and adoption of established engineering education innovations? How do department chairs find out about innovations, and what are important factors?	Quantitative Survey	197 U.S. engineering dept. chairs
Lee, Goldstein, Kramer, Steiner, Ezzell, & Shah (2010)	Identify factors that promote the diffusion of tobacco free colleges	Understand the progress of the Tobacco Free Colleges Initiative using diffusion of innovation	Qualitative	64 colleges
Murphrey & Dooley (2000)	Identify strengths, weaknesses, opportunities, and threats associated with distance ed.	What were strengths, opportunities, weaknesses, and threats expressed, and how did they impact the rate of adoption?	Qualitative Naturalistic inquiry	42 faculty, staff at a large university
Petruzzelli (2010)	Examine the correlation between principal knowledge of diffusion of innovations theory and the level of fidelity of implementation	What effect does principal training on diffusion of innovations theory have on the fidelity of implementation in school as measured by short-term behavior changes?	Quantitative survey	Principals

Author(s)	Purpose	Research Question(s)	Method(s)	Sample
Shea (2005)	Identify the motivating factors of industries to adopt a digital on – demand book printing	What was the innovation decision process of adopting digital on-demand book printing technology?	Qualitative Interviews	913 faculty
Surendra (2001)	Explore relationships between diffusion factors and the acceptance of web based educational innovations	Do perceptions of technology influence the rate of adoption at a community college?	Quantitative survey	109 professors and administrators at a community college

Research by Borrego, Froyd, and Simin Hall (2010) found that widespread adoption of innovations for engineering department chairs is more likely the greater extent of the change agent's promotion efforts. This study also showed that the adoption of more complex innovations, including those requiring coordination across college campus units, need a combination of collective and authority decisions. Another finding of this study was that interpersonal networks play a key role in diffusion of innovations and that like-minded individuals are more likely to have better communication around the innovation.

Murphrey and Dooley (2000) studied the diffusion of distance education policies in practices in a College of Agriculture and recommend focusing on administrative support, training, and incentives to diffuse the innovation. The researchers found that focusing on administrative support helps to provide a seamless infrastructure and 'presence' for the student. Researchers claim that incentives should include recognition in the promotion and tenure process.

Research by Surendra (2001) examined diffusion factors to predict the acceptance of web technology by college professors and administrators. Access and training were found to be the

best predictors of the diffusion process for the web-based educational innovation. The researcher found that the diffusion factors, Roger's attributes of innovations, are useful predictors of the adoption of innovation. Research has shown that using the diffusion of innovations theory has wide application to various industries, including education. Though the research shows many applicable examples of the use of the diffusion of innovations theory, many do not explain how and why innovations spread (Dearing, 2009). Understanding the diffusion of innovations theory and its attributes provides a framework on how community college leaders adopt and diffuse PLA practices to promote adult college completion. Examining attributes of diffusion and recognizing strategies to help stakeholders adopt an innovation was critical in understanding how the community colleges in this study were successful in promoting integrated procedures and policies that led to the diffusion of PLA.

Prior Learning Assessment

PLA has existed in the United States higher education system since World War I. During this time, higher education was focused on discovering options for returning veterans to demonstrate skills and knowledge in order to transition into the civilian workforce (Lakin et al., 2015). Similarly, an increase in the number of women, minorities and returning veterans seeking higher education, created the need for additional postsecondary options between 1968 and 1973. During the late 1970s and the 1980s college students became more mobile. Despite the history of PLA, wide-range use has been sparse within public higher education and is beginning to gain more traction in recent years as more adults return to complete a post-secondary degree. Erisman and Steele (2015) found that adult students come to college or reenroll with a wide variety of learning under their belts, and see opportunities to receive credit for prior learning as an important factor in achieving their educational goals. PLA can be defined as a systematic

process used by postsecondary institutions to award college credit for those skills gained outside a traditional classroom setting (Brigham & Klein-Collins, 2010). This learning can be gained from previous academic or work experiences, volunteering, and hobbies. A recent Lumina Gallup Poll reflects growing interest among the general public in returning to postsecondary education if more institutions were to grant credit for what individuals already know (Merisotis, 2016).

Fiddler, Marienau, and Whitaker (2006) worked to establish the first formal guidelines for the recognition and claimed "assessment of student learning is best when the process involves a set of logical decisions and not an idiosyncratic moment of judgment" (p. 10). The researchers identified ten principles to assess PLA, which were later adopted by the Council for Adult and Experiential Learning (CAEL). These principles are as follows:

1. Credit should be awarded only for learning, and not for experience.
2. College credit should be awarded only for college-level learning.
3. Credit should be awarded only for learning that has a balance, is appropriate to the subject, and is between theory and practical application.
4. The determination of competence levels and of credit awards must be made by appropriate subject matter and academic experts.
5. Credit should be appropriate to the academic context in which it is accepted.
6. Credit awards and their transcript entries should be monitored to avoid giving credit twice for the same learning.
7. Policies and procedures applied to assessment, including provision for appeal, should be fully disclosed and prominently available.

8. Fees charged for assessment should be based on the services performed in the process and determined by the amount of credit awarded.
9. All personnel involved in the assessment of learning should receive adequate training for the functions they perform, and there should be provision for their continued professional development.
10. Assessment programs should be regularly monitored, reviewed, evaluated, and revised as needed to reflect changes in the needs being served in the state of the assessment art (Fiddler et al., 2006).

These standards stress the notion that credit is awarded only for evidence of learning, not for experience or time spent. Guiding principles to characterize effective PLA programs, include (a) integral to learning to enable future learning, (b) based on criteria for outcomes that are clearly articulated (c) advances the broader purpose of equity (d) inclusive and deliberate policies and procedures, (e) provides access for diverse individuals and groups and (f) are regularly monitored, evaluated and revised to respond to institutional and learner needs (Fiddler et al., 2006).

Institutions can use various methods to validate learning. PLA methods include student portfolios; evaluation of corporate and military training by the American Council on Education (ACE); institutional program evaluations that measure recognized proficiencies; departmental challenge exams; and standardized tests, including Advanced Placement (AP®), College Level Examination Program (CLEP®), Excelsior College Examinations (ECE), and DSST Subject Standardized Tests, formerly known as the Defense Activity for Non Traditional Education Support (DANTES). Student portfolios consist of a collection of artifacts describing experience and learning, and typically include documents, letters of verification, or essays describing

specific situations or experiences that document non-formal, non-collegiate activities (Klein-Collins, 2010).

PLA helps to solve barriers to degree completion, such as time and cost, by allowing adult learners to earn institution credit for work and life experiences. Marienau (2014) claims PLA is "an educational innovation that saves time, and money attracts positive press" for institutions that implement effectively (p. 1). Moreover, PLA offers students a pipeline to apply previous life experiences, including military training, hobbies, civic activities, and volunteer service, for college credit (Klein-Collins, 2006). Applying PLA involves the transportability of credits, an openness to extra-institutional learning, and the transfer and award of credit between dissimilar institutions. Wilbur, Marienau, and Fiddler (2008) suggest that a robust PLA program allows students to analyze, reflect upon, and make meaning of previous learning. Therefore, academic leaders should establish policies and procedures that build sustainability and accuracy of PLA implementation (Gambescia & Dagavarian, 2007). PLA programs should proactively provide guidance and support for learners' full engagement in the assessment process, and practitioners involved in the assessment process should receive adequate training and continuing professional development (Fiddler & Marieanau, 2006).

Studies on prior learning show positive impact and outcomes for students. The largest multi-institutional study conducted by CAEL, which included data from 62,475 students at 48 undergraduate institutions, found that 43 percent of adult students who earned credit for prior learning were more likely to earn a degree, as compared to 15 percent of non-PLA students, showing the impact it can have on student outcomes (Klein-Collins, 2010). Similarly, a study by The College Board showed that students who successfully took advantage of

standardized forms of PLA have better college outcomes than those who did not (Mattern, Shaw, & Xiong, 2009).

Donoghue, Pelletier, Adams, and Duffield (2002) found that the academic achievement of nurses who were hospital-trained was similar to that of nurses with formal qualifications in a graduate nursing program. Nurses who were effectively able to demonstrate their prior learning from their hospital-trained experiences did just as well as nurses who had been formally trained. Likewise, LeGrow, Shecley, and Kehrhahn (2002) found that the cognitive skills of students who earned prior learning were equal to those who acquired formal institution-level instruction in a business management continuing education program. Students who were able to get credit for prior learning and knowledge on business subject matters faired just as well in subsequent courses as students who had only been educated on the topic through coursework. Similarly, Barry (2013) found that CLEP students performed as well as or better than non-CLEP students who took the prerequisite course.

Students who receive prior learning credits also have more confidence in their participation in post-secondary studies. Andersson and Hellberg (2009) found that prior experiences and learning helped students in their trajectories to see themselves participating in formal higher education. This research supports that of Chickering (2011), who states, "By assessing their prior learning from work and life-experiences, students realized how much they know and could do" (p. 31).

A review of the literature shows that being able to use prior learning to earn credits for advanced academic standing encourages persistence and helps to shorten time to degree. Earning PLA can help students complete their degrees more quickly, which can lead to other benefits in their lives and the workplace (Zalek, 2013). Lester (2007) stresses the value in being

able to award credit fully or partially that can be built upon to meet a qualification in order to complete earlier.

Moreover, Klein-Collins (2010) found that PLA bachelor's students were more persistent in accumulating credits and saved an average between 2.5 and 10.1 months of time in earning their degrees when compared to non-PLA students. Likewise, CLEP students graduated in less time, enrolled in fewer semesters, maintained a higher GPA, and graduated with fewer credits in comparison to non-CLEP students (Barry, 2013). Though they earned credits, adult students were actually more apt to take more credits if they had previously received PLA. Table 4 provides a synthesis of prior learning research articles.

Table 4

Empirical Research Studies on PLA

Author(s)	Purpose	Research Question(s)	Method(s)	Sample
Andersson & Hellberg (2009)	Understand how child minders' prior experiences and learning are recognized in the first year of a pre-school teacher ed. programs	How are childminders' prior experience and learning recognized in the first year of a pre-school teacher education program?	Qualitative interviews	10 student teachers
Donoghue, Pelletier, Adams, & Duffield, (2002)	Compare academic achievements in graduate nursing programs between those with undergraduate qualifications and those admitted using a recognition initiative	Is there a difference in academic achievement of formally credentialed nurses versus trained nurses?	Quantitative questionnaire	310 graduates in five cohorts over five years

Author(s)	Purpose	Research Question(s)	Method(s)	Sample
Fjortoft & Zgarrick (2001)	Determine the use of prior learning assessment (PLA) in nontraditional PharmD (NTPD) programs	Is PLA becoming more commonplace in U.S. higher education, and are portfolios a viable method of awarding credit for life experience/learning?	Quantitative questionnaire	25 NTPD programs
Lester (2007)	Examine whether the process of accrediting prior experiential learning as used in U.K. universities is the most appropriate approach for providing academic recognition for work-based projects/learning.	Is awarding APEL an efficient way to recognized work-based learning?	Qualitative Examined projects	5 candidates
Klein-Collins (2010)	Compare 48 institutions on prior learning assessment and adult student outcomes.	Do adults who earn PLA have better graduation rates and persistence compared to those who do not?	Mixed-methods Student and institutional data	62,475 students at 48 institutions

Previous research on PLA shows that there is a positive relationship between PLA and successful outcomes. Likewise, research supports the reasons college leadership, politicians and policy makers find PLA beneficial in helping adult learners' complete college. Lederman (2010) claims that credit awarded through PLA offers an opportunity to entice adults back to college with the prospect that they can build on previous learning and reduce time and money needed to earn a credential. Smith (2010) asserts that adult learners that are able to receive recognition for prior learning provides access to college and work advancement.

The literature shows that the enrollment of adult learners is increasing. Therefore, understanding the importance of PLA to degree completion aids higher education leaders in

making key decisions about strategy (Chappell, 2012). In this study, community college leaders identified PLA as one of the strategies to potentially increase the number of adult learners that earn a degree. Through examining previous research on PLA, the community colleges in this study were able to understand how to effectively implement and diffuse this strategy.

Community Colleges

Community colleges have been charged with increasing college completion rates in order to increase the viability of the U.S. economy. In a 2009 speech, President Obama declared, "It's time to reform our community colleges so that they provide Americans of all ages a chance to learn the skills and knowledge necessary to compete for the jobs of the future" (Badolato, 2014, para. 2). Community colleges are a critical driving force of the nation's workforce development solution.

The National Conference of State Legislators (2014) reported that there is great potential for community colleges to grow the number for degree completers to fill middle-skill jobs. Due to the open access and affordability of community colleges, student populations are typically characterized by low-income, first-generation, minority, or working adults, with almost half of the community college population between the ages of 22 and 39. However, though millions of students enroll in community colleges, the rate of success as measured by earning a credential is less than 50 percent ("The Changing," 2014). A report by the American Association of Community Colleges (AACC) (2015) states national education leaders believe in the success of community college students earning a degree and that the previous learning experiences of adult students' matters. This prompted the AACC (2015) to partner with five national organizations to set a goal for community colleges to produce 50 percent more students with high-quality degrees and certificates by 2020.

From 2000 to 2006, enrollment for community colleges showed a steady increase of about 2 percent (AACC, 2015). As the recession hit, between 2006 and 2009, community college enrollments increased by 18%, with enrollment peaking in the fall of 2010. Likewise, a report by the U.S. Department of Treasury with the Department of Education (2012) found that enrollment in colleges has grown and changed drastically over the past two decades, with significant increases in the number of students pursuing postsecondary education. Corresponding with this change is the number of older students who have returned to the college classroom, which has created a new interest and commitment on college campuses. The increased number of adult learners on college campuses has required many institutions to rethink how they have historically operated.

Community colleges are faced with the challenges of adult learners persisting through completion of a degree; it is not enough to just enroll these students. Community colleges have quickly learned that adult practices and policies must be better implemented in order to attract, retain, and graduate adult learners. Researchers declare, "We are not likely to meet our future needs by just doing more of the same" (National Commission on Adult Literacy, 2008, p. 4). Likewise, Bailey and Morest (2006) exclaim, "While we still have work to do on access, colleges now need to focus on improving the success of those students" (p. 3).

Though there is potential for community colleges to meet degree completion goals, there are still may challenges, including implementing innovative strategies, like PLA, to promote shortened time to degree. Improvement of the success of community colleges implementing PLA should be focused on completion, in which students graduate with the knowledge, experience and skills recognized for a credential. Table 5 summarizes empirical research for prior learning assessment studies conducted at community colleges.

Table 5

Empirical Research Studies on PLA at Community Colleges

Author(s)	Purpose	Research Question(s)	Method(s)	Sample
Brigham & Klein-Collins (2010)	Determine availability, use and value of prior learning assessment within community colleges	What can be learned about the availability and use of PLA within community colleges?	Mixed-methods survey	81 institutional contacts
Chappell (2012)	Study prior learning assessment in degree completion	What role does PLA have in postsecondary degree completion for adult community college students?	Quantitative descriptive statistics	660 community college graduates
Hayward & Williams (2015)	Examine adult learner graduation rates by PLA status and method at community colleges	What is the difference in graduation rates between non-PLA learners PLA learners and method used?	Quantitative questionnaire	4 community college data sets

A study by Hayward and Williams (2015) found that adult PLA learners graduated at 2.4 times the rate of adult non-PLA learners. This study, which examined graduation rates from four community colleges, showed a significant link between extra-collegiate learning and graduation. The researchers found increased graduation rates of adults who earned credit for ACE recommendations (24%), a combination of PLA methods (29.9%), and successful CLEP scores (52.3%). A study by Brigham and Klein-Collins (2010) found that many adult-learner students come to community colleges with prior learning, including technical skills learned in the workplace; however, many times these students are not receiving credit for the college-level learning that they already have. More despairingly, this study found that the use of PLA is very small, even though over 90% of the community colleges reported enrolling students who likely

have technical training that could be assessed for college-level credit. Additionally, the researchers found that 70% of colleges felt the need to expand their PLA options in the future, even though most colleges were not actively making plans in that direction.

A review of the literature provided insight on the important role community colleges have in helping to create pathways for adult learners in a globally competitive workforce. Community colleges are challenged with implementing PLA successfully in order to promote degree completion. The community college leaders in this study recognized the role PLA plays in adult degree completion and used this knowledge to diffuse processes that will lead to improved graduation rates. Focusing on creating more integrated PLA processes and improving institutional policies and practices assisted the community colleges in this study to be more prepared to accept and award credit for previous learning attained by adult learners.

Institutional Practices

Despite research showing that integrated PLA processes are necessary for successful implementation, a review of literature also shows the lack of institutional support in regard to implementing PLA policies and procedures. Joosten-Ten Brinke, Sluijsmans, Brand-Gruwel, and Jochems (2008) found that though research shows the benefits of awarding prior learning, the procedures lack responsibility and support from faculty and administrators. Likewise, Taylor and Clemans's (2000) research found that institutions do not feel comfortable with prior learning procedures and policies. Castle and Attwood (2001) found that typically, higher education infrastructures are inadequate to implement effective prior learning policies.

Research by Lakin et al. (2015) shows that institutionalizing PLA represents a significant departure in how colleges usually award credit. Moreover, PLA policies vary among colleges, and implementing PLA at the institutional, state, or system level requires an investment of time

and resources in building faculty engagement, developing effective PLA policies, and ensuring students are aware of these policies (Erisman & Steele, 2015). Likewise, many institutions have a disconnect between institutional policy and practice (Lakin et al., 2015). Creating institutional commitments to meet the needs of adult learners requires a concerted effort by faculty, staff, and administration (Roundree-Wyly & Lambert, 1988). If institutions fail in serving the needs of adult learners, they will fail at recruiting, retaining, and graduating these students. Kazis et al. (2007) assert that college programs and policies are not well designed for the needs of adult learners and claim that "understanding the unique needs of adult learners is critical to designing higher education systems and policies that support this population and promote their success" (p. 2). Erisman and Steele (2015) claim colleges should better serve adults for whom a chance, or a second chance, at higher education can make such a difference in their lives. Community colleges should begin to recognize how to better serve the needs of adult learners in order to encourage attainment of post-secondary credentials.

Research shows that the ways in which adult-friendly policies and processes are established are inconsistent across institutions in the United States (Travers, 2009). Many colleges lack commitment to widening access to higher education, and there is a need to establish more appropriate, flexible, valid, and reliable systems, including PLA, that higher education institutions can implement to attract and retain adult students. Merisotis (2015) states:

> We need to take a new approach to higher education in this country. We need to redesign the system so that it better serves today's students—the ones who should succeed in tomorrow's world. The reality is, today's postsecondary system simply can't produce the talent we need going forward. Far from it. The system doesn't produce enough

graduates overall … and certainly far too few among these post-traditional students (para. 36).

Very few colleges make students aware of the opportunities for prior learning and provide few options for awarding credit (Armsby, Costley, & Garnett, 2006). More research is needed on how learners can be supported in understanding the PLA process. Joosten-Ten Brinke et al. (2008) found that there cannot be merely a policy, but rather real academic and administrative supports to foster successful experiences (p. 63). Table 6 highlights studies on institutional practices for implementing PLA. The literature revealed that many of the most significant challenges faced by community colleges for adult learners are in policies and practices.

Table 6

Empirical Research Studies on Institutional Practices for PLA

Author(s)	Purpose	Research Question(s)	Method(s)	Sample
Armsby, Costley, & Garnett (2006)	Understand if learning can be articulated and evidenced by a university for advanced standing	Do various practices question the legitimacy of prior and experiential knowledge in the U.K.?	Qualitative Vignettes	5 tutors
Lakin, Nellum, Seymour, & Crandell (2015)	Understand institutional perspectives on comprehensive credit for prior learning policy and practice	What types of infrastructure contribute to and sustain innovative institutional practices? How do institutions share information with students and encourage faculty engagement?	Qualitative Interviews	7 colleges and universities
Taylor & Clemans (2000)	Analyze and comment on recognition for prior learning (RPL) for credit transfer	What are nationally applicable protocols and procedures for RPL in universities?	Mixed Questionnaire, Interviews	35 universities in Australia

Improvements in PLA practices and policies may also improve retention and completion and provide a substantial return on investment for colleges willing to undertake a process of change (Erisman & Steele, 2015). Lakin et al. (2015) found that the presence of institutional practice and policy that guide PLA activities is critical to enable administrators and faculty to sustain initiatives. To be successful at implementing PLA, the community colleges in this study examined and reevaluated their institutional policies and procedures. Much effort was committed throughout the study to ensure that practices and policies were integrated in order to implement a sustainable and integrated PLA infrastructure.

Summary

The change explored in this research study is to effectively implement a robust PLA system at three community colleges in order to increase adult college degree completion. As stated in the AACC (2015) report, "With the completion agenda as a national imperative, community colleges have an obligation to meet the challenge while holding firmly to traditional values of access, opportunity, and quality" (p.23). Examining the diffusion of innovations theory helps to understand how community college leaders can successfully implement PLA and increase rate of adoption on campus.

The literature shows that PLA is a proven strategy to help attract adult learners to enroll, persist, and complete college. However, most community colleges do not always have effective policies and processes in place to successfully implement PLA in order to best serve adult students. As valuable as the studies reviewed are to the body of knowledge on PLA at community colleges, there remains a lack of research on implementing and diffusing PLA practices. The paucity of studies on the relationships on diffusing the innovation of PLA at

community colleges to promote adult college completion lends credence to the importance of this study in the body of knowledge.

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CHAPTER 3

METHODOLOGY

This chapter provides an overview of the research design appropriate for this action research case study. As a case study, this research was explanatory and descriptive in nature in order to examine PLA implementation at community colleges. The current chapter will detail the action research approach, the study's participants, data collection methods and the data analysis method. The conclusion of the chapter will discuss the study's trustworthiness, research subjectivity and limitations.

The purpose of this action research case study was to explore how community college leaders implement strategies to effectively diffuse prior learning assessment (PLA) practices to promote adult college completion. The study's methodology was a qualitative action research case study designed to address a specific purpose and answer the following research questions:

1. How do community college leaders effectively diffuse prior learning assessment (PLA) strategies to promote adult college completion?
2. What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of PLA practices in community colleges?
3. How do an external diffusion group and lead researcher support fidelity of PLA implementation in an action research study?

Epistemological Orientation

Research methodology can be defined as the system that defines how things are done when finding and understanding knowledge (Merriam, 2009). This was a qualitative action research case study. Qualitative research is defined by Merriam (2009) as seeking to understand how people interpret experiences, how they construct their worlds, and the meaning attributed to these experiences. Merriam's definition reflects a constructivist perspective, which was adopted in this study. Within a constructivist paradigm, there is no single, observable reality. Creswell (2014) states that constructivist paradigms promote a dialogue between researchers and subjects who construct reality together through interviewing, observation, and text analysis (p. 8). Moreover, Creswell (2014) asserts that within this paradigm, the researcher relies on the participants' views of the situation being studied.

Qualitative Methodology

In many research scenarios, a qualitative approach is used when little is known about a phenomenon and one seeks to gain a perspective that will be unique, new, and richly detailed (Creswell, 2014). Qualitative research can be defined as any research that produces findings that are not arrived at by statistical procedures (Strauss & Corbin, 1990). Qualitative studies collect data through interviews, observations and document analysis (Merriam, 2009).

Hoepfl (1997) claims that qualitative inquiry provides a mechanism for understanding the complexity of the social world and can be used to gain new perspectives about what is not known. Qualitative research uses the natural setting as the data source and the researcher as the human instrument of data collection (Hoepfl, 1997). Qualitative researchers seek to find the uniqueness in each case and use interpretations as a method of discovering the meaning behind

the participants' experiences. Qualitative research has an emergent design and is not predetermined.

Elements of a constructivist qualitative methodology include:

- bounding the inductive inquiry within a particular naturally occurring context,
- analyzing the experience as part of a complex temporal, sociocultural and geographic whole,
- using the investigator as research instrument, and
- reporting the data in stories of narratives (Schwandt, 1990).

Strengths of qualitative research include the opportunity it provides to collect and rigorously examine narrative accounts of social worlds (Silverman, 2011). Guastella (2009) found his qualitative research study provided richness to reader experiences because they could relate their own experience of multiple roles, developmental stages, learning experiences, and college experience to that of participants. Qualitative research was used in this study to get data that address a practical problem in order to understand stakeholders' perspectives on the issues. In this study, the researcher intended to understand effective strategies to diffuse PLA implementation within community colleges from the perspectives of those leading the implementation.

Action Research Methodology

Action research is a problem-solving process that encourages collaboration in designing, implementing, and evaluating solutions to promote change. Stringer (2014) defines action research as a complex process in which researchers and participants repeat processes, revise procedures, rethink interpretations and make changes in direction. It is a reflective process that involves gaining new perspectives and insights to plan further action. Action research is an

inquiry process in which applied behavioral knowledge is integrated with organizational knowledge in order to solve problems and bring about change (Coghlan and Brannick, 2014). In this study, action research was used to bring change within an organization in order to address and resolve the issues it faced. Action research is a collaborative process that allows the researcher and participants to solve problems and generate new knowledge in order to foster change within organizations (Coghlan & Brannick, 2014). The action research (AR) team worked together to understand and develop actions to accomplish goals by reviewing each campus's policies, practices, and systems used to promote and implement PLA. Action research involves applying corrective action to a problem (Burke, 2014). The reflection that ensued from the action research process helped the team to develop sustainable innovations and strategies to increase the capacity of the three colleges to successfully implement PLA. Quality action research should be collaborative, promote further knowledge of the issue and generate practical outcomes, while also including reflection. Coghlan and Brannick (2014) assert that good action research shares a good story with rigorous reflection and usable knowledge.

The process of action research involves a pre-step phase which includes establishing context and purpose. Also in this pre-step phase, collaborative relationships should be established and key stakeholders and personnel should be identified. Establishing context and purpose involves examining the driving social, political, and economic forces in determining the problem and understanding the future state of conditions if interventions are effective (Coghlan & Brannick, 2014). In this study I had multiple conversations with the consultant from the Council of Adult and Experiential Learning (CAEL) to understand the work that was being proposed with the partnership between CAEL and South Consortium (pseudonym). I expressed my interest and desire to work with South Consortium for my action research project.

I explained the action research methodology to the CAEL consultant, who then put me in contact with the leadership of South Consortium. The South Consortium leadership and I engaged in conversations around their expectations for studying PLA to improve adult college completion. I shared with them my previous experience in working with programs to better serve adult learners, the purpose of action research, the potential timeline, and goals.

After the pre-step, the next four basic steps of action research include: constructing the problem, planning action, taking action, and evaluating action (Coghlan & Brannick, 2014). The first step in the action research cycle is constructing. Constructing involves participating in dialogue and engaging with stakeholders. Constructing occurred during the first few AR team meetings. Key actions in this phase include identifying what the issues are and providing rationale and evidence for the basis of the action research (Coghlan & Brannick, 2014). During this step, the results of the Healthy PLA survey that was administered by the participating campuses immediately before this research study started were reviewed. This step also includes articulating the practical and theoretical foundations of action through collaboration (Coghlan & Brannick, 2014). Collaboration is critical in action research to ensure that the all stakeholders are engaged in the process of constructing the problem. I collaborated with two CAEL consultants and the AR team to determine the problem that we would seek to address through this action research study.

The second step is planning action, which entails the exploration of the purpose and context for the research. During this step, I introduced the concepts of the diffusion of innovations theory to the AR team and we collaborated to determine ideas for potential interventions. The third step in action research is taking action in which collaborative efforts and decisions are made to implement plans and interventions. Several interventions were

implemented throughout the duration of the study. In the early months, these interventions were the result of the AR team working collaboratively with me and the CAEL consultants for successful implementation. In the later months, the CAEL consultants were no longer involved in the study, so I worked with the AR team to continue the implementation of the plans and interventions. The last phase is evaluating action, which entails collecting data, planning for next steps, and evaluating outcomes (Coghlan & Brannick, 2014). Evaluating action occurred throughout the study through reflective conversations during AR team meetings. Additionally, evaluation occurred when a benchmarking assessment was given to the AR team campuses as well as other peer campuses that did not participate in this study. Lastly, evaluation occurred during critical incident interviews with AR team members at the conclusion of this study. One of the prompts asked the AR team members to self-assess areas of growth and improvement in categories included on the Healthy PLA survey, which initially guided this study. These steps were repeated in a cycle depending on the needs of the situation, as shown in Figure 3.

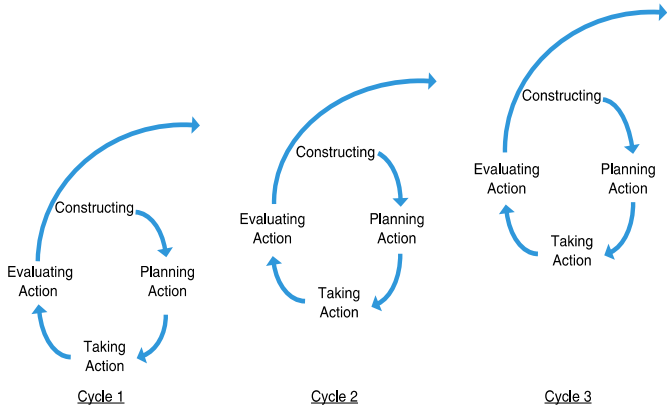

Figure 3. The spiral action of action research.

The cycle of activities in action research aims to increase practitioner-researcher knowledge of the original problem (Ivankova, 2015). Throughout this process, actions and interventions can be continually revised or improved. The various cycles can have different time

spans. Hinchey (2008) states, "it is not enough to plan and implement an action; its results should be systematically analyzed to determine whether desired improvements have occurred" (p. 4). Each cycle includes problem identification, data collection, analysis, interpretation, action implementation, and evaluation (Ivankova, 2015).

In the core action research cycles mentioned above, the second cycle is known as the reflection cycle (Coghlan & Brannick, 2014). During the reflection cycle, participants are constructing, planning, taking action, and evaluating how the project itself is going and what is being learned. Employing action research produces learning at the individual, group, and system levels (Coghlan & Brannick, 2014). Argyris (2003) asserts that this inquiry of the cycles themselves is central to the development of actionable knowledge that enables AR to be more than problem solving. This concept is defined by Coghlan and Brannick (2014) as meta-learning.

AR facilitates effective collaboration and communication at each level in order to produce knowledge that is beneficial to the field. Stringer (2014) asserts critique within action research derives from the diversity of individuals and groups participating, with each perspective being challenged by others. Moreover, action research creates products, including plans, procedures, models, and maps that provide the basis for reformulating practices, policies, programs and services within organizations. (Stringer, 2014). Ultimately, action research promotes change. These cycles as they were enacted in this study are discussed in Chapter Four.

Case Study

This study used a qualitative case study strategy to describe the research activities of South Consortium. An action research case study allows for learning to occur within the researcher as well as within participants. Marsick and Watkins (1997) note that case study

researchers follow the process in a non-linear approach. Case study is defined by Silverman (2011) as research on a system bounded in space and time and embedded in a particular physical and social cultural context, in which the researcher is not interested in the organization itself, but rather behaviors that take place within it. Merriam (2009) states, "a case study is an in-depth description and analysis of a bounded system" (p. 40). In this research study, the bounded system was the AR team, who are members of South Consortium, and the phenomenon was the exploration of how team members implemented PLA through various interventions in each of their institutions and how the AR team supported them in that process. A case study identifies the organization as the setting and includes hundreds of occurrences that the researcher observes, and individuals that the researcher meets many times during the research (Silverman, 2011). Moreover, Yin (2014) states that case studies help researchers understand complex social phenomena and make meaningful interpretations of real-life events. A case study justifies the selection of a particular case in terms of the goals of the study and existing theory and research (Maxwell, 2013).

This is a single embedded case study in which the type of design is single and the unit of analysis is embedded. Yin (2014) states, "the single case can represent a significant contribution to knowledge and theory building by confirming, challenging or extending the theory" (p. 51). A single case study design can help refocus future investigations in the field. The data in this study are explanatory and descriptive, making it appropriate for a case study (Yin, 2014). A case study was appropriate for this AR because the researcher sought to understand and explore how a PLA system would be implemented within community colleges. This research focused on the real-life experiences of the community college personnel and issues and challenges faced while

implementing PLA, as well as the role of a cross-unit team in facilitating dissemination of a high-fidelity innovation developed by an external association.

Organizational Context

The bounded system in this case study was a consortium of American public higher education institutions referred to as South Consortium. South Consortium consists of six institutions, three of which participated in this study. Like many institutions, South Consortium is challenged with improving college completion and is particularly focused on increasing skilled participation in the workforce.

One objective of South Consortium is to develop PLA processes to award adult learners' credit in order to accelerate time to completion. Three member institutions of the South Consortium were tasked with being the early adopters of PLA processes. This team was a collaborative body focused on sustaining and expanding PLA options at their institutions. Other objectives included developing high-level, consistent PLA processes that allow for institutional autonomy.

Research Sample

This action research case study utilized a purposeful sample. A purposeful sample is defined as a small number of "information rich" participants intentionally selected from those who have knowledge and individual experience with studying the phenomena (Ivankova, 2015). Similarly, Merriam (2009) states that "purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore should select a sample from which the most can be learned" (p. 77). This study began with selecting a team of individuals to be the action research team. The team included the lead researcher, along with primary stakeholders, which consisted of three chief academic officers and three program

managers. From this group, there were two representatives for each of the three participating campuses. The sample selected for this case study was based on the relationships of individuals committed to implementing PLA at their respective community colleges. Research participants signed a consent form agreeing to participate in this AR case study while simultaneously executing their regular job responsibilities with no additional compensation.

Data Collection Methods

Data collection is important to the research plan. This study used qualitative data collection methods to understand the research questions. After obtaining approval from the University of Georgia's Institutional Review Board, data were collected from various sources including interviews, casual conversations, meeting notes, and organization documents. Qualitative data generated revealed initial beliefs, attitudes, and behaviors to inform the problem statement.

This was a multi-phased project. The importance of data gathering is that it enables exploring a problem and evaluating implementation of interventions addressing the problem (Anderson, 2010). The interventions in this study sought to address how to successfully implement PLA in community colleges. Data collection also evaluated the action research process. Data collection methods included documents—those generated by both the project and the archival documents, transcripts of group meetings, final stakeholder interviews, and other products that emerge as part of the work of the AR team. Researching the process of change for the research team entailed document review, meeting transcripts, observations, critical incident interviews, assessment surveys, and researcher notes over the course of the project. Maxwell (2013) states, "the joint use of observations and interviews can address the same issues and research questions, but from different perspectives" (p. 104). The research plan shown in

Table 7 outlines how the multiple types of data collected from various stakeholders were used to address the research questions. Information includes the details of the research, design, methods, and procedures that were be used for data collection in this study.

Table 7

Data Collection Methods

Type of Data	**Target**	**Method**	**Data Analysis**
Document Review	AR Team	Review of literature, records from organization, pre-assessment survey results	Provided foundation to support ideas on PLA policies and implementation
Meeting Transcripts	AR Team	Constant comparative analysis; both inductive & deductive coding	Provided AR cycles collection of ideas to support organizational change
Observations	AR Team	Constant comparative analysis; both inductive & deductive coding	Provided AR cycles collection of ideas to support organizational change
Critical Incident Interviews	AR Team	Constant comparative analysis; both inductive & deductive coding	Provided AR cycles collection of ideas to support organizational change
Assessment Survey	AR Team & Non-participating peer institutions	Constant comparative analysis; both inductive & deductive coding	Provided data for benchmarking and progress of change for the AR team and gave information on current status for peer institutions
Researcher Notes	Primary Researcher	Constant comparative analysis; both inductive & deductive coding	Validated perceptions in third person as another form of data collection

Document Review

The research design entailed a review of organizational documents, which were obtained from each participating campus. Documents provided objective information about the issue of interest. Documents may include reports, policy statements, minutes, organizational records, procedural materials, or public relations materials. Advantages of reviewing documents included providing a reliable and unobtrusive source of information that exists independent of researchers and participants that can reveal solutions to similar problems in published sources (Ivankova, 2015). The review of documents was conducted by the researcher and the AR team.

Meeting Transcripts

The AR team participated in 13 team meetings during this study. During each meeting the researcher took notes and recorded the meetings. All meetings notes were transcribed. This provided descriptive data and team process details to inform the findings. The meeting notes were analyzed using the constant comparative method. The data generated a coding scheme and themes were developed.

Observation

Observation is defined by Ivankova (2015) as "the process of observing and recording events, situations, behaviors, and interactions of people in natural settings to explore individuals' experiences with the studied issue" (p. 203). Observation provides a direct and powerful way of learning about people's behavior and the context in which it occurs (Maxwell, 2013). The researcher reflected on observations of the team's development during the project. It is important to document experiences and team dynamics not only for the team's time for self-reflection, but also for the overall project's success and the ultimate purposes of the dissertation.

Assessments

During the last cycle of this study an assessment survey was developed by the principal investigator, Karen Watkins, and myself as the primary researcher to better understand where the participating three institutions were in implementing PLA in comparison to peer institutions that were not a part of this study. The purpose of survey research was to generalize from a sample of a population through some form of data collection (Creswell, 2013). Surveys gather data through fixed response options that are aimed to collect information on a studied issue (Ivankova, 2015). Data collected through surveys help to show trends in different stakeholder views about the problem, the needed interventions and the effectiveness of taking action. Advantages shared by Ivankova (2015) of using a survey for data collection in an action research case study include providing effective methods to collect information about the issue in a short period of time, and that it can be used as a primary or supplemental data source for concurrent study designs. The benchmark survey used in this study helped provide clarity on progress made by the three institutions.

Critical Incident Interviews

The purpose of critical incidents "is to focus on events that seem to have a marked impact on the experience of major stakeholders" (Stringer, 2014, p. 144). AR members participated in critical incident interviews with the researcher to reflect on their experience and learning over the course of the project. Silverman (2011) claims that interview subjects are "repositories of facts, reflections, options and other traces of experience" (p. 152). The critical incident technique was initially developed by Flanagan (1954). Ellginger and Watkins (1998) found that narrative critical incident techniques are useful for capturing leadership behavior and mental models. Flanagan (1954) defines critical incident technique as:

> A set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles. The critical incident technique outlines procedures for collecting observed incidents having special significance and meeting systematically defined criteria (Flanagan, 1954, p. 327).

Stringer (2014) states that critical incidents may appear as moments that result in an "a-ha" experience that provides people with clarity about events or phenomena. This technique occurs in five steps as outlined by Flanagan (1954) including (a) establishing the general aims, (b) planning specifications, (c) collecting data, (d) analyzing data, and (e) interpreting and reporting the findings. The first step of establishing aims provides a description of "specifying precisely what is necessary to do and not to do if participation in the activity is to be judged successful" (Flanagan, 1954, p. 336). In step two, planning specifications, the situations are observed to the extent of the effect on the general aim. In step three, data, collection, the researcher applies criteria to the incidents while they are being collected, including actual behavior and verifying relevant factors to the situation. Next, when analyzing data, the general frame for describing the incidents is selected based on the theoretical framework, and codes are inductively developed. The last step of interpreting and reporting findings entails reading through raw data and conducting data reduction processes to code data and develop themes related to the proposed research questions (Flanagan, 1954).

Ellinger and Watkins (1998) state that using the critical incident technique provides researchers the opportunity to collect data that solicit an understanding of mental models and rationales that guide behaviors, environmental factors that influence behaviors, and resulting outcomes related to specific behaviors. Moreover, critical incident interviews provide an

opportunity for people to reflect on obstacles faced when working hard to accomplish something important (Stringer, 2014).

Silverman (2011) asserts that interviews convey respondents' meaning-making. The interviews were conducted via phone conference at a convenient time for participants and were recorded and transcribed. During the critical incident interviews, the following prompts were given:

- Tell me about your role at your institution.
- Discuss on a scale from 1-5 each dimension of where you are now in this area and what ways have you improved or changed (policy and procedures, academic criteria, assessment, student support, infrastructure, oversight, and research).
- Tell me about facilitators of disseminating and institutionalizing PLA at your institution.
- Tell me about barriers to diffusing PLA practices on your campus.
- Tell me about a specific time when you had a turning point in learning from participating in the PLA Charter Team (AR team).

The interviews were transcribed and analyzed using the constant comparative method. Merriam (2009) states that "verbatim transcription of recorded interviews provides the best dataset for analysis" (p. 110). Once transcribed, the data were first coded inductively and then deductively to identify developing themes linked to the theoretical framework.

Researcher Notes

Journaling is typically done in private and consists of reflections of meetings and observations soon after the event (Coghlan & Brannick, 2014). I took notes during the AR team meetings. These notes were beneficial in filling in gaps of the study. Documenting journal entries about experiences helps the researcher clarify personal biases (Bannister, 2009).

Journaling brought forth biases that I had in interactions with the AR team when deciding the direction of probing questions and inquiries. For example, I many times brought into the context my previous experience in working with high education officials to implement PLA. Therefore, I would catch myself being prescriptive. I would reflect and determine how to be more facilitative to guide the work of the interventions as opposed to me sharing my perspective on what should occur based on my own previous experience.

Data Analysis

Designing a plan for data analysis along with data collection methods informed the overall research study design. The qualitative data generated from this study was analyzed using a constant comparison method of data analysis. Qualitative analysis is defined as the organizing of data, breaking it down, synthesizing it, discovering what is important, looking for patterns, and telling others what to do (Bogdan & Biklen, 1982). The raw data from this study were collected from observations, meetings, documents and interviews. Data were recorded and transcribed, and transcriptions were reviewed to determine emergent themes. Excel software was used to analyze the data. Using Excel to manually code the data allowed for a clear and visual strategy to analyze data (Miles, Huberman, & Saldana, 2014). The qualitative data were analyzed with memos to facilitate analytical thinking about the data. Data from memos were categorized and contextualized using coding. A constant comparative method was used, which encouraged comparison between data sets, drawing out similarities for further grouping.

To facilitate the constant comparative method, coding was used. Straus and Corbin (1998) state that coding helps to categorize and synthesize information into meaningful constructs. Hoepfl (1997) suggests that the researcher adopt a level of creativity so that the data can be placed into meaningful themes and categories in order to effectively communicate the

interpretation of these data to others. Categorizing analysis is the identification of units or segments of data that seem important (Maxwell, 2013). Table 8 describes the themes used in the excel document and coding schemes used for my data analysis. The subthemes that provide answers to the research questions are described in the Findings chapter.

Table 8

Coding Themes

Research Question	First Round of Coding	Second Round of Coding
1. How do community college leaders effectively diffuse prior learning assessment (PLA) strategies to promote adult college completion?	Why It Matters	• Mission of Institution • Purpose • Guiding Principles • Impact
	What Success Looks Like	• Awareness • Understanding • Knowing
	Robust System	• Comprehensive System • Integration of Processes
	Collaboration	• Action Research Team • PLA Campus Advisory Team • Articulation Agreements
2. What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of PLA practices in community colleges?	Leadership	• Commitment • Positionality
	Interventions	• Action Plan • Assessment Plan • Professional Development • Benchmarking
	Outreach	• Marketing
3. How do an external diffusion group and lead researcher support fidelity of PLA implementation in an action research study?	Challenges	• Time • Intentionality • Staying Focused • Common Understanding

A thematic analysis was used to analyze the data. Open coding allows the researcher to identify and name categories to group the data (Straus & Corbin, 1990). Working with the data continuously allowed me to create meaningful codes that answered the research questions.

Trustworthiness

This action research case study used triangulation to promote trustworthiness in the data. Triangulation occurs when the researcher uses multiple and different sources, methods, investigators, and theories to corroborate findings (Creswell, 2014). Triangulation includes a number of approaches, including using a combination of multiple data sources to enhance the credibility of research findings, as was done in this study (Ivankova, 2015). Transcripts of meetings, critical incident interviews, researcher's journals, and an assessment survey were used for the purpose of triangulation in the study. It is important in action research to collect multiple sources of data to corroborate the same finding in order to develop a convergence of evidence in validating research (Yin, 2014). Triangulation is a core element of action research and serves to integrate data. Triangulation also helps to minimize ambiguity when developing intervention plans, and helps to increase confidence in the research findings (Ivankova, 2015).

Creswell (2014) identifies other ways to achieve validation for qualitative researchers, including prolonged engagement and member checking. Prolonged engagement includes persistent observation in the field in order to build trust (Creswell, 2014). Prolonged engagement also allows change team members adequate time to communicate thoughts, perceptions, and options surrounding the project. In this study, the AR team engaged with each other around this work for a year, with monthly meetings and frequent email communications throughout the duration of the study. Moreover, member checking is apparent when peers review, debrief, and conduct an external check of transcripts, findings, and the research. Member checks occurred

when AR team members reviewed transcribed and coded data from meeting transcripts and critical incident interviews for their approval before being used in the study.

Validity

Validity in action research refers to the extent to which findings provide an accurate reality (Hoepfl, 1997). In qualitative research a central dimension of validity involves the correspondence between the theoretical framework and the observations made by the researcher (Silverman, 2011). This study used construct validity, which involved deductively developing a priority codes based on the guiding theory (Rogers' diffusion of innovations theory) to examine the relationship between the theoretical concepts and the observations and data that represented these concepts.

Important to the validity of this study are one's biases as an outside researcher. In a study by Bannister (2009) the researcher found herself having to refrain from adding her opinion and thoughts about the direction of the research. The researcher stated, "it is hard to remove oneself from the emotional connection one feels to a topic and focus on being an active listener, but it was a necessary part of the research" (Bannister, 2009, p. 37). As an outside researcher, and having previous experience with PLA implementation in another context, I sometimes had to remove my personal thoughts and opinions during the research process. For example the AR team decided not to move forward with developing a consistent PLA policy across all three campuses. Rather they preferred to keep the revised PLA policies, campus specific. However, I was somewhat biased initially towards this decision, because in previous experience, success of PLA implementation was facilitated by a consistent policy across campuses. I had to remind myself, that this context was different, and what may have proven successful in the past at other institutions may not be the best fit for the campuses participating in this study.

Subjectivity Statement

A subjectivity statement is a summary of who researchers are in relation to what and whom they are studying (Given, 2008). Researchers develop these from their personal histories, cultural worldviews, and professional experiences. The purpose of a subjectivity statement is to help researchers identify how their personal features, experiences, beliefs, feelings, cultural standpoints, and professional predispositions may affect their research in order to convey this to other researchers for consideration of the study's credibility, authenticity, and validity. From the outset, it is important to clarify researcher biases that explain assumptions and prejudices, or past experiences that have shaped the approach of the study (Creswell, 2014). Researcher subjectivities may bias, unbalance, and limit endeavors, but they may also motivate and illuminate inquiry (Given, 2008).

As the primary researcher in this study, I found it necessary to disclose my background and relevance to this study. In my previous professional role I focused on adult-friendly practices for adult learners in a state system of public colleges and universities. My personal journey of a baccalaureate degree was that of a traditional college student, and I received my undergraduate degree from a full-time private women's liberal arts college in the South. Two years after receiving my bachelor's degree I received my master's degree from a for-profit college. I was currently working, and was accepted into the state's top public colleges, but would have been required to enroll as a fulltime graduate student. At the time, none of these public colleges were offering evening/flexible master's degree programs; hence I decided to keep my job and enroll in the flexible scheduled for-profit institution. I began my doctoral studies as a wife and working mother of a one-year-old, eight years after receiving my master's degree.

Thus I chose a program that offered a weekend blended curriculum, again affording me the flexibility I needed to pursue my degree while juggling my many roles and responsibilities.

My role in my former position sparked a passion in me to help higher educational institutions better serve adult learners. It was in my time doing this work that I became more keenly aware of the needs of adult learners and the resources to help them. My interest became even more apparent when I found myself encouraging my husband to go back to school to complete his degree as an adult learner. This experience was very gratifying to see how I was able to personally influenced someone close to me and help him achieve his own goals; however, it was frustrating to see the barriers that existed in public universities, even for returning adult students attempting to go back where they had started, to complete a degree. Seeing my husband successfully complete his degree developed a great admiration in me on behalf of adult learners. It is this set of experiences that have framed my biases. I feel passionately that all adult learners deserve the right to be treated as if they and their prior experiences matter at institutions of higher education.

Limitations

This study had several limitations. Limitations that I could not control were the fact that participants were not geographically located in a convenient location to travel to monthly AR team meetings. Therefore, we were unable to conduct the AR team meetings in person, and most of the meetings were conducted via teleconference. This situation was similar to that of the critical incident interviews, which were also conducted via phone. Using the phone was a methodological limitation because face-to-face observations could not be made. Novick (2008) asserts that the absence of visual cues via telephone may result in loss of contextual and nonverbal data and may compromise rapport, probing, and interpretation of responses.

Contrastingly, research shows that telephones may allow respondents to feel relaxed and able to disclose sensitive information because it allows participants to remain on "their own turf," permit more anonymity and privacy, decrease social pressure, and increase rapport (McCoyd & Kerson, 2006, p. 399). Therefore, though using the telephone to conduct qualitative research was a limitation in this study, it did not negatively impact outcomes.

Additionally, only members of South Consortium that were initial supporters of PLA participated in this study. Three other institutions that were members of South Consortium did not support PLA, and did not participate in this study. This is a limitation because participation from other South Consortium campuses would have expanded the scope of this study including the number of participants and reach. Moreover, some of the non-participating South Consortium members represented various forms of higher education institutions, including four-year colleges and universities. Hence, if all members of South Consortium would have agreed to participate, the scope of the study would not have been limited to PLA implementation at community colleges only.

Methodology Summary

The AR team engaged in an inquiry process for one year by participating in 13 team meetings and implementing five interventions. The AR team was involved in several cycles of AR, including constructing the problem, planning action, taking action, and evaluating action. Data were analyzed and triangulated to produce trustworthiness in the study. Limitations and researcher subjectivity conclude the chapter. The data collected informed the following case study, and was organized based on the cycles of action research.

CHAPTER 4

STORY AND OUTCOMES

PIECING TOGETHER THE PUZZLE TO IMPLEMENT PRIOR LEARNING ASSESSMENT

Successful prior learning assessment (PLA) implementation requires many pieces of a college to work together in order to provide cohesive and sustainable experiences that lead to college completion. A robust PLA program includes clear policies and procedures, high academic criteria, student support, trained faculty assessors, supportive infrastructure, and oversight and research. A strong PLA program is consistent, transparent, rigorous, and adequately resourced. Institutions seeking to fully implement PLA have various pieces of the puzzle; however, the pieces are not coherently integrated. When thinking about diffusing the innovation of PLA, solving the puzzle will help to implement a process that gets at the big picture, with integrated systems interlocking to create a sustainable strategy. The big picture in this case study was institutionalizing PLA to promote adult college completion in order to meet workforce development needs. Understanding what puzzle pieces are needed and how they fit together is analogous to promoting innovation through PLA practices and policies on college campuses to support college completion goals. This sentiment is expressed by an action research (AR) team member:

> *You think about all the many touch points within our college, of where our students move through, I think so often we look at PLA in pieces, and I think this has really brought to the forefront just how comprehensive it has to be across the college community.*

The purpose of this AR case study was to explore how community college leaders implement strategies to effectively diffuse prior learning assessment (PLA) practices to promote adult college completion. The following research questions guided this study:

1. How do community college leaders effectively diffuse prior learning assessment (PLA) strategies to promote adult college completion?
2. What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of PLA practices in community colleges?
3. How do an external diffusion group and lead researcher support fidelity of PLA implementation in an action research study?

This study followed Coghlin and Brannick's (2014) cycle for conducting action research, which consists of a pre-step and four basic steps: constructing, planning action, taking action and evaluating action. This action research study was comprised of multiple cycles of constructing, planning action, taking action and evaluating action. This chapter will discuss entry into South Consortium (pseudonym), three AR cycles, and the respective steps as they unfolded in real time. The chapter begins with a discussion of the pre-step, specifically context. The discussion also includes a description of the AR team. The story as it cycled through three AR cycles of construction, planning, action, and evaluation will be presented. In subsequent sections of this chapter, the following action research cycles are described:

- Cycle 1: Producing order by focusing on convening relevant stakeholders, providing professional development, and homing in on outreach and process infrastructure strategies
- Cycle 2: Creating a framework to measure goals and identify outcomes
- Cycle 3: Fitting together as a collaborative AR team to understand progress accomplished

These cycles framed the story of this action research case study. Table 9 outlines the various meetings and activities held throughout the course of the study within each of the three AR cycles.

Table 9

AR Team Activities

Cycle	Activity	Date	Agenda
CYCLE 1	Meeting 1	December 16, 2015	• Kick-Off • AR • Research Expectations
	Meeting 2	January 8, 2016	Plan January 29 Professional Development Day
	Meeting 3	January 22, 2016	• Process Mapping • Plan January 29 Professional Development Day
	Face-to-Face	January 29, 2016	Professional Development Day
	Meeting 4	February 5, 2016	• Debrief of Professional Development Day • Webinars and Marketing • Follow-up Items: (assessment, PLA certification, policy)
	Meeting 5	February 19, 2016	Plan Webinar
	Webinar 1	February 26, 2016	#1 PLA Fundamentals
	Meeting 6	March 4, 2016	Plan Webinars
	Webinars 2-4	March 11, 2016	PLA Roles & Responsibilities • #2 Faculty • #3 Student Support Professionals • #4 Staff & Administration
	Meeting 7	March 18, 2016	• Touchbase • Evaluate Progress
	Meeting 8	March 29, 2016	Marketing Plan

Cycle	Activity	Date	Agenda
CYCLE 2	Meeting 9	April 29, 2016	• Research Status & Purpose • AR/Interventions • Theory of Change
	Meeting 10	May 29, 2016	• Research Purpose • Action Plans • Assessment Strategy (measures) • Support
	Meeting 11	June 23, 2016	• Update on Campus Team Meetings • Assessment Strategy (measures) • Diffusion of Innovation (rate of adoption)
	Meeting 12	July 29, 2016	• Update on Progress • Critical Goals to PLA Implementation • Challenges and Barriers
	Meeting 13	August 29, 2016	• Update on Potential Culmination Activity • PLA Implementation Matrix (progress update) • Logic Model Feedback
CYCLE 3	Meeting 14	September 23, 2016	• Planning for CAO presentation • AR Team Focus Group
	Presentation	September 28-30, 2016	CAO Meeting
	Interviews	October-December 2016	Critical Incidents

Pre-Step: Finding the Puzzle Pieces

Before you begin putting a puzzle together, the box has to be open. After opening the puzzle box one has to gather all of the pieces needed to begin working on completion. In this study, a research site had to be matched with the researcher in order to start the work. The AR study presented in this case spanned one year of collaboration between the researcher and the client system. This partnership evolved during the AR cycles of construction, planning, action,

and evaluation throughout the course of the study. Ongoing negotiation of roles among the researcher and participants, and the study stakeholders was evident throughout the study. The negotiation was more apparent due to the researcher's role as an external investigator during the study. This section will discuss my positionality as the external researcher. Additionally, an overview of the research site, the study stakeholders, and participants will be shared.

My Positionality

Preparation for this study took shape between summer 2014 and fall 2015 and was informed by my learning through doctoral study. Specifically, I pursued courses on action research methodology and conducted a literature review that provided a basis for the study. During this time, I was employed at an organization that oversees the governance of state higher education colleges and universities. I served as project director for adult learner initiatives for two-year and four-year colleges. In this role I supported efforts to create adult-friendly practices to support postsecondary degree attainment. I specifically managed a consortium of 15 institutions and universities that worked collaboratively to improve programs, policies and services for adult students, including PLA. My experience included recommending policy, identifying and communicating best practices, and aligning institutional and system-wide adult-friendly initiatives. I worked with several national organizations through consulting partnerships, including the American Council on Education (ACE), The College Board, and the Council for Adult and Experiential Learning (CAEL).

Initially, I was planning on conducting my AR research study within the system in which I worked. While employed in this role, I regularly shared my learnings and course materials with leadership in my division. These informal opportunities to share my research caused me to gain greater interest, commitment, and a vested interest in this topic.

In fall 2015, the grant which employed me was phased out, and hence I lost my job. I requested to continue the proposed research as planned within this context, but was denied permission and had to find another site. I was in touch with my former director, who had retired from her position, and she presented to me a research opportunity in partnership with CAEL, the organization with which she was currently working as a consultant. CAEL is a national non-profit organization that works within higher education and public and private sectors to enhance learning opportunities for adults. This opportunity allowed me to keep my topic on PLA; however I would be working with community colleges in a different state.

Client System

The setting for this action research project was South Consortium, which consists of six public higher education institutions. South Consortium is located in the southeastern United States. A major focus of South Consortium is supporting workforce development needs by creating career pathways that promote increased adult college completion rates. One objective of South Consortium is to develop PLA processes to award adult learners credit in order to accelerate time to degree completion. Likewise, goals of the consortium included developing a high-level, consistent PLA process that allows for institutional autonomy.

Three of the six South Consortium institutions participated in this study. These three institutions are classified as public community and technical colleges. The three participating colleges agreed and committed to be early adopters of implementing PLA processes within the state. This group was henceforth known as the AR team. The AR team formed as a collaborative group to sustain existing efforts and expand PLA options at each of the three individual campuses. Before the AR team was formed, South Consortium contracted with

consultants from CAEL to provide guidance on developing and implementing PLA processes and policies.

Entry

The entry phase of AR includes conducting initial conversations with the client to clarify the problem and gain agreement on the expectation of the work accomplished. I showed great interest and had multiple conversations with my former director, Trina, who was working at CAEL to help guide entry into the new system. The purpose of these conversations was to explain the action research process and make her aware of the goals of my AR project. She connected me with the project leads of South Consortium in order to complete this research study. My major professor agreed that South Consortium would be a good research site for the study, and thus I began collaborating and contracting with the AR team. My former director shared the work that she was doing with South Consortium, and it aligned with my research interests. My previous work and academic experience fostered my ongoing intrigue and inquiry for using a rigorous approach to investigate and develop a solution for implementing PLA to promote adult college completion.

Contracting Process

The purpose of the contracting process was to explore initial issues and to reach an agreement on the work of the AR team. In October 2015, I met again with my former director to discuss in more detail the goals and direction of my action research project. After this meeting my former director contacted leadership for South Consortium and CAEL to propose my interests in working with South Consortium for my AR project. I prepared a summary document of my research proposal, including purpose and research questions. Both parties reviewed my proposal and provided permission for me to serve as a researcher in this capacity.

The contracting process was a time for the researcher and client to reach a shared understanding and agreement on expectations, timelines, needs and expectations (Anderson, 2010). During the first AR team meeting I provided an Executive Summary of the action reserach process and discussed a potential timeline to begin meeting with the AR Team. As an outside researcher, it was important for me to set clear expectations and timelines. My sponsor expressed continued support of this project and felt that it was timely due to the interest by stakeholders to research and better understand this issue. Stakeholders were interested in understanding the problem of how to best implement PLA at their respective campuses based on the following trends in higher education: (a) greater market to enroll non-traditional students; (b) research showing the positive effect on student persistence and completion; (c) competitive higher education market; (d) strengthened business/college partnerships; and (e) the opportunity for workers to repurpose skills to support new and evolving industries. The interest of each campus around this work helped to solidify the need to use an AR paradigm for this project.

AR Team

An important part of the action research process was to collaborate with others who have ownership of a problem. The AR team was identified by their membership in South Consortium. The team consisted of six participants, including a chief academic officer (CAO) and program director/manager from each of the three institutions. Stringer (2014) asserts that typically AR teams are democratic and engage stakeholders directly in solving problems by suggesting that effecting AR occurs when there are (a) significant levels of active involvement, (b) people perform significant tasks, and (c) the process supports learning through action. Engaging three CAOs in this study showed each campus's commitment to accomplish goals related to PLA implementation. The CAEL consultant, Trina, responded to this notion by stating, "*The three*

institutions had a strong relationship, got along well and they shared many of the same goals and values." The individual roles of the AR team are found in Table 10**.** As the researcher, I planned and facilitated several teleconference meetings on a monthly basis in conjunction with CAEL and the AR team.

Table 10

AR Team Roles

College	Name	Title	Role
A	Lisa	VP Academic Affairs	Responsible for all instruction, academic policy making and compliance, and academic development activities of the institution.
A	Kim	Program Manager	Manages functions and activities of South Consortium
B	Cathy	VP Academic Affairs	Leads the institution's academic programs and services and ensures the quality of curriculum, instruction, and assessment. Priorities include removing barriers to student success.
B	Ed	Program Director	Manages and directs the South Consortium through recruitment, selection, training, and supervision of program staff. Coordinates with staff, faculty, students, and appropriate community resources to provide counseling, workshops, and advising services to students.
C	Gary	Senior Vice President	Provides leadership to the academic, student support, enrollment, and economic development functions of the institution.
C	Emily	Program Manager	Manages functions and activities of South Consortium.

Cycle 1: Producing Order

When putting a puzzle together, the first step is to sort the pieces. Each piece is a part of the big picture. When first reviewing the various puzzle pieces, there is typically a lack of clarity and focus. Awareness of what pieces you have helps to bring order and direction to the confusion. As within this study, understanding the existing strengths and challenges of PLA processes and practices on each campus was the beginning of producing order.

The first action research cycle engaged the team in producing order to better understand best practices of implementing a robust PLA system. This section describes the team's actions in the first cycle of constructing, planning action, taking action, and evaluating action to implement PLA.

Constructing

During Cycle 1, the AR team created a project charter. The purpose of the charter was to define the collaborative effort of the three participating intuitions. Additionally, the goals of the charter were:

- Sustain and expand prior learning assessment options at three community colleges
- Develop a high-level, consistent PLA process that allows for institutional prerogative
- Develop a PLA model with possible application statewide

The charter included the project purpose, deliverables, scope, plan and milestones, assumptions, constraints and dependencies, and team members. Gary shared the importance of the charter to the role for progressing the work forward:

> *Across all three of the colleges, I think it was the collaborative way that we developed the charter so that everyone understood what the outcomes were. Once that happened it seemed like the work begin to occur, and the work gained traction. Until that occurred it*

was like an abstract idea. As soon as everybody agreed on the outcomes in one of the initial meetings that we had where we were finalizing the charter and we made a commitment to achieve those, then I think there was some traction.

Table 11 highlights key aspects of the project charter.

Table 11

AR Team Charter Highlights

Category	Description
Business Need	A large proportion of community members aged 24 and older do not have the credentials required to attain available jobs in a growing manufacturing industry. However, many of these potential students possess skills that can be applied to gain a credential. Colleges use multiple assessment tools to validate prior learning experiences, including prior learning assessment. However, the tools are not integrated into a harmonized system to more strategically assess the myriad of prior learning experiences.
Purpose	To develop a consistent prior learning assessment system, applicable for use at multiple institutions, and to design a pilot to test the effectiveness of the newly designed PLA system.
Deliverables	• Perform a gap analysis of each college's prior learning assessment and credit for prior learning program, using the Healthy PLA Assessment Tool. • Identify per college which gaps need to be filled and create institution-specific processes and accompanying process maps to address those respective gaps. • Develop a consistent set of PLA system standards to recognize and award college credit through the assessment of students' prior learning. • Recommend modifications of roles and responsibilities to ensure new processes are sustainable. • Recommend a marketing plan that creates community awareness of each college's PLA process.
Scope	• Collaborate with employees. • Examine existing PLA-related processes. • Conduct research regarding best practice/benchmark PLA processes and systems. • Consult with CAEL to develop or redesign existing PLA-related processes.
Assumption	Designing a consistent PLA process applicable to three institutions will require a collaborative spirit and support from each institution's leadership.

Also during Cycle 1, the AR team gathered, reviewed, discussed and analyzed data, including current policies and catalogs. Data generation helped to expand the team's knowledge on the problem in order encourage deeper exploration. Each institution has a unique mission, but all are focused on student-centered learning to achieve goals. In support of the institutional missions, PLA is a tool that values what students have learned in order to accelerate their time to degree completion. To frame the PLA challenges at each institution, the AR team collected data to document the scope of the problem and how it varies at each institution. Data was gathered by various key actions, including defining the current state by engaging with various stakeholders such as registrars, admissions personnel, and deans. Campuses defined areas of improvement and standardization of processes and communication. Additionally, I posed guided reflections to help them really consider the commitment that would be needed to achieve PLA implementation. One of the initial questions during an AR meetings that I asked was "*Considering the acceleration of this project, and the timeline that is needed to get the work done, what is competing for your attention to respond to and put your energy to this project*?" Though all of the team members discussed competing priorities and lack of time, they all committed themselves to being engaged in this work, because they each felt it was a necessity to support adult college completion goals. A review of existing data from each institution was essential to creating a common understanding of PLA implementation issues.

Initial data collection. Initial data collection was conducted through existing efforts of the partnership between the AR team and CAEL. As a collaborative effort with CAEL and South Consortium, institutions created the Healthy PLA Survey. The objective of the survey was to assess the extent to which PLA was institutionalized at each of the three campuses. The Healthy PLA Survey helped to assess the state of each college in implementing PLA based on

six categories, including (a) PLA policies and procedures; (b) academic criteria; (c) assessment; (d) student support; (e) infrastructure; and (f) oversight and research. The survey results were reviewed by each campus, and collective interpretation and discussion ensued at the first meeting. Wolcott (2009) posits, "interpretation invites the reflection and pondering of data in terms of what people make of them" (p. 30). The discussions provided an opportunity for the AR team to discuss collaborative actions.

Data collected from the Healthy PLA survey revealed that there was little knowledge and institutionalization of PLA across each campus. One respondent indicated PLA is valuable, but more awareness is needed, by stating, "*PLA needs to be known more throughout the college. The practices are beneficial to all members and students and training/ knowledge should be had by all*." Hence, although PLA was taking place in isolated incidents, or some departments, widespread awareness did not exist. Another respondent commented, "*It is my belief that in my division, faculty and staff are unaware of this program [PLA] at all*." Another respondent shared a similar sentiment: "*I am speaking mostly for this department's PLA approach, as I am unsure of some areas in the college and how they approach PLA*." The data revealed that PLA was not institutionalized, and lack of this effort does not support full implementation at each campus. Table 12 shows categories and descriptions represented in the survey.

Table 12

Healthy PLA Survey Categories

Category	Descriptions			
Policies and Procedures	A range of PLA methods is provided.	Policy regarding credit awards (student eligibility, applicability, limits, transcription, transfer) is published	Business processes are in place and are reasonable, including student fees and faculty compensation.	PLA is an integral part of the college's outreach and marketing.
Academic Criteria	Policies conform with CAEL Principles 1-5.	Faculty are responsible for ensuring academic rigor for PLA.	Learning outcomes articulate learning, not learning processes.	Faculty support the PLA program and assist in its implementation.
Assessment	Assessors are trained to do assessment	Faculty assessors are appropriately compensated.	Testing centers, faculty assessors, and/or external resources are readily available.	
Student Support	Students regularly receive help in understanding and making decisions about PLA	Students receive clear and accessible information about PLA	Students have options for financial support for PLA	
Infrastructure	Administrative processes conform with CAEL Principles 6-10.	The PLA process is facilitative, consistent, and designed to encourage policy implementation.		
Oversight and Research	Data collection process are established.	Institutional research understands use and impact of PLA metrics		

Problem formation. The AR team and the CAEL consultants learned several key points from the initial data collection. The findings indicated several challenge areas for increased implementation of PLA at each campus. Overall, results showed student support areas had the lowest scores across AR team colleges. These inconsistences showed work was needed in ensuring each institution fosters practices and policies that promote a successful PLA program. Challenge areas that were apparent from the survey results included the following:

- PLA is not an integral part of the college's outreach and marketing.
- Students do not receive help in understanding PLA in making decisions.
- A program of professional development is not implemented, especially for new staff.
- Faculty and other staff do not understand PLA policy and processes.
- Internal players do not know their roles and responsibilities or have the knowledge and resources.
- PLA information is not regularly shared with faculty, staff.

When asked about the results of the survey, Gary exclaimed, "*This group of three colleges have identified this as an institutional problem that we want to solve*." These opportunities were considered in planning details for the study. Table 13 and Figure 4 show the collective averages out of a score of five on the various sections of the Healthy PLA Survey from the participating campuses.

Table 13

Averages on Healthy PLA Survey of AR Team Campuses

Section	College A	College B	College C	Section Average
1.0 PLA Policy & Procedures	1.78	3.47	2.65	2.63
2.0 Academic Criteria	2.03	3.69	3.10	2.94
3.0 Assessment	1.11	2.90	2.72	2.24
4.0 Student Support	1.17	2.74	2.11	2.00
5.0 Infrastructure	1.47	3.32	3.12	2.64
6.0 Oversight and Research	1.34	3.10	2.64	2.36
Overall PLA Process Average	1.78	3.20	2.72	2.47

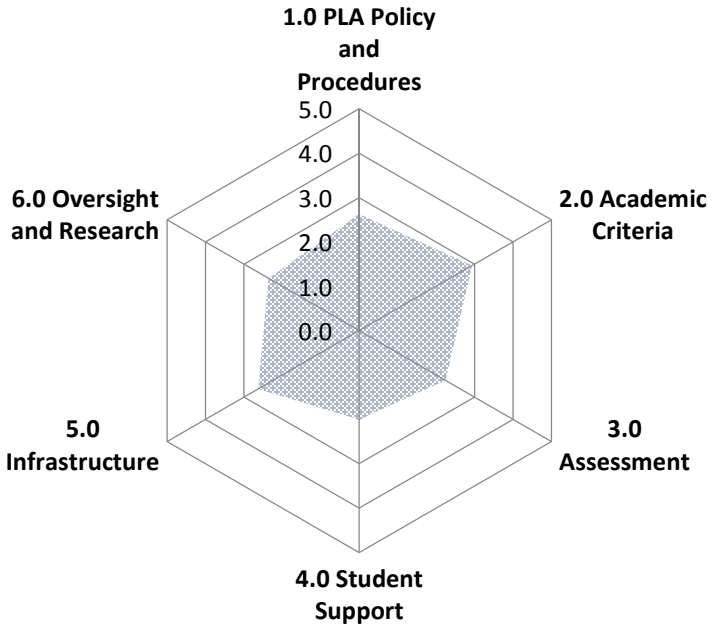

Figure 4. Averages of the Healthy PLA Survey of AR team campuses.

Identifying challenges and opportunities encouraged the AR team to conduct a gap analysis of each college's PLA program in order to work toward improving campus-specific processes to achieve outcomes. This sentiment is supported by a comment from a survey respondent: "*Our institution has not embraced the full concept of PLA and its positive impact on recruitment and enrollment*." The gap analysis helped to identify key needs in working toward implementing a robust PLA system. Table 14 shows key needs revealed in the gap analysis by campus.

Table 14

Campus Gap Analysis

Category	College A	College B	College C
Policies and Procedures	A policy exists but does not support an integrated system.	A policy exists but does not support an integrated system.	A policy exists but does not support an integrated system.
Academic Criteria	• Information about PLA is difficult to find. • Policies and procedures are minimal. • Faculty need training and professional development around PLA.	Need to standardize process.	Faculty are unaware of PLA.
Assessment	Professional development and training for faculty is needed.	Assessment processes vary by instructor and department.	Clarity on processes for assessment and compensation is needed.
Student Support	Need increased marketing to students and information in college catalog.	• Students are unfamiliar with PLA and requirements. • Advising does not automatically include the opportunity for PLA.	Lack of awareness from staff and students.

Category	College A	College B	College C
Infrastructure	Work is needed on administrative processes.	Updates are needed to handbook, e-catalog, website, student services.	A few staff are committed to successful PLA implementation.
Oversight and Research	Need clarity on PLA policies and the alignment to CAEL standards. Communicate more research on the impact PLA has on recruitment and enrollment.	Define the current state process for PLA and come to an agreed understanding as a college for improvement.	Alignment is needed with institutional research office on measures

After the gap analysis review and discussion during the first meeting, it became apparent that much of the work would be campus-focused, though the AR team would frame the interventions collaboratively. Essentially, this data would provide a base-line point from which interventions would be developed and measured.

Planning Action

A clearer understanding of the need to improve PLA systems allowed the AR team to plan actions that would move each campus to its desired state. With collaboration between me and CAEL, the AR team developed interventions that would become the basis of the research study. The potential interventions focused on three areas of opportunity, including (a) faculty/staff engagement and development; (b) student outreach and support; and (c) infrastructure, policies and processes. The team had several telephone conferences to begin developing the action plan. During planning, the AR team also identified major stakeholders impacted by this study. The impacted stakeholders and their roles and responsibilities are delineated in Table 15.

Table 15

Stakeholder Roles and Responsibilities

Major Stakeholders	Roles & Responsibilities
Project Board Members (AR Team)	Drive communication. Set policy to drive behavior and support, and advocate to build support.
Project Team Leads	Drive communication. Emphasize a priority to drive behavior and support sustainable processes.
CAEL Consultants	Serve as an advisor to PLA best practices. A good source of successes and challenges that occur in the field.
Administration	Sponsor support for institutional PLA practices and policies.
Faculty	Assess and award students PLA credit. Understand best practices in assessment. Serve as an advocate for PLA.
Advisors	Share, promote and advise students on PLA options.
Registrars	Assess previous credit and apply credits earned appropriately.
Students	Recipients of PLA credits awarded for previous learning.

Taking Action

The three focus areas formulated into five specific interventions during Cycle 1. The AR team selected these interventions due to perceived institutional readiness to take a systematic approach to implementing PLA. Anderson (2011) states that intervention strategies are more effective when the client system has the time, energy and motivation to implement the change. Each institution participating in this study had the commitment and willingness to engage in PLA interventions. The change team initially identified five interventions: (a) form and convene a campus advisory team, (b) plan a Professional Development Day, (c) host a webinar series, (d) create a Process Map, and (e) create a PLA marketing plan. An intervention is a means to initiate change within a system, not the individual (Burke, 2013). The interventions center on

creating a robust PLA system at each college. Lakin, Seymour, Nellum, and Crandall (2015) claim that PLA implementation must be staged, in order to make strategic connections across the college. Table 16 provides an overview of the interventions during this first cycle, and a timeline for the interventions.

Table 16

Cycle 1: Intervention Plan

Focus Category	Intervention	AR Team Activities	1. Anticipated Outcomes 2. Connection to Problem	Timeline
Infrastructure, policies/ processes	Create and convene a campus team	Identify and meet with key stakeholders from cross-functional departments to work together to expand PLA policies and practice.	1. Determine opportunities, challenges and barriers at each college. 2. Put people in place to manage PLA-related programs and services.	Nov. 2015 – Sep. 2016
Faculty/staff engagement and development	Professional Development Day	Plan Professional Development Day for stakeholders to collaborate to better understand the campus PLA experience	1. Understand Best practices in implementing PLA. 2. Demonstrate increase or positive change of attitudes, knowledge, and information sources.	Nov. 2015 – Jan. 2016
Faculty/staff engagement and development	Webinar series	Provide development input, participate and complete.	1. Understand best practices in implementing PLA 2. Webinar design and information address barriers and needs expressed in Healthy PLA survey.	Feb. 2016
Infrastructure, policies/ processes	Process Mapping	Identify activities, define responsibility and process.	1. Put people and structures in place to manage PLA program. 2. Demonstrate intentionality in processes.	Jan. 2016 – Sep. 2016

Focus Category	Intervention	AR Team Activities	1. Anticipated Outcomes 2. Connection to Problem	Timeline
Student outreach and support	Marketing plan	Inform marketing needs, identify target audiences, goals, and communication.	1. Share information on website and other venues to communicate with students and community. 2. Students are more aware of PLA options.	Mar. 2016 – Sep. 2016

This staged implementation increases the likelihood of adoption. The change team staged the interventions in order to maximize likelihood of adoption at each college.

Campus team. The first intervention was to identify key stakeholders at their respective colleges to serve as a PLA advisory team. This designated team would be in attendance at a face-to-face Professional Development Day on January 29, 2016. The AR team worked to identify campus representatives to make up each team, and planned the agenda for the Professional Development Day. Roles represented on the campus team included registrars, advisors and financial aid representatives.

Professional Development Day. During the Professional Development Day, the campus representatives from the three colleges met as a group face-to-face. It was very important to the AR team that they lead the sessions of the Professional Development Day as opposed to myself or the CAEL consultants. This leadership was critical to gaining support and buy-in from the campus representatives. A report by the Manufacturing Institute (2012) states, "leadership is a critical variable in promoting PLA; personal engagement on the part of a visionary college leader can be the pivotal point in promoting the importance of seamless pathways for students" (p. 13). The charge for participants at the Professional Development Day included:

- Finalize campus-specific processes and standards
- Plan strategies to address gaps and launch processes
- Identify desired professional development

The focus of the morning session was to provide knowledge to faculty and staff on PLA. For the afternoon session, the colleges went into campus-specific breakouts, where they built a common understanding about PLA processes and student experience on campus. It is during this session that the AR team led their campus teams in a process mapping workshop. The purpose of this workshop was to better understand how each campus could provide a supportive infrastructure on business processes and resources. For the last session, the larger group reconvened to share next steps for each campus. The agenda for the day included (a) a review of process standards and process issues, (b) a preview of the PLA Intake Tool, and (c) work on action planning.

A debrief of the Professional Development Day was held during the next AR team meeting. Lisa stated, *"The turning point [of this project] was that day [because it] involved representatives from the whole campus; everybody has got to be behind PLA. That day, I felt like they could and would be."* After evaluating the outcomes of the Professional Development Day, the AR decided more professional development opportunities should be made available to faculty and staff who were unable to attend.

Process mapping. The AR team decided that in order to better improve PLA processes and infrastructures, a process map should be developed. Process mapping is an approach used to look at operations across each campus to understand how a student who is pursuing PLA options is impacted. The AR team felt that despite good PLA intentions, resources, and policies, the maximum potential for PLA would not be realized if implementation was not efficient and effective. The strategy the AR team took to accomplish process mapping included identifying

campus personnel who interact with a potential PLA student. The process map would better understand the flow of inquiry, assessment, and the awarding of credit during the PLA process. During the process mapping session, campuses focused on answering these key questions:

- Do stakeholders know the information needed to help the student with PLA?
- Does everyone know the next step?
- How is information about the student transferred to the next person?
- How will personnel know that the next part of the process has happened?

College A defined their respective processes by focusing on steps students should take to get awarded PLA credit by understanding the various stakeholders that could potentially be a touch point for a prospective PLA student. Their initial approach was understanding the process through the lens of a student's experience in implementing PLA as shown in Figure 5.

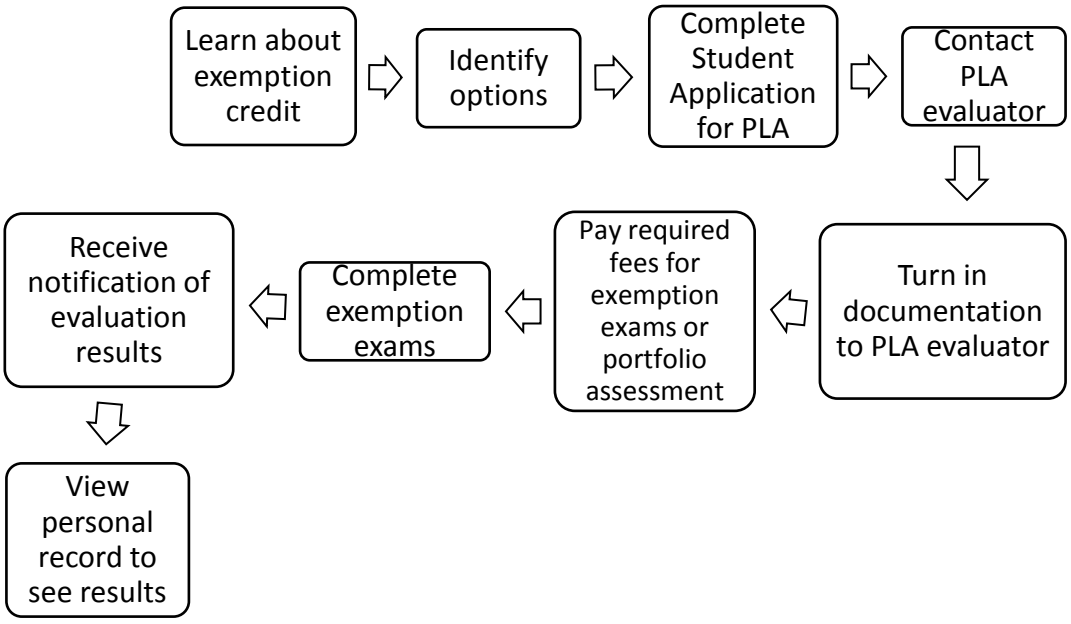

Figure 5. College A: PLA process for students.

College B created a cross-functional flow chart which included various stakeholders including: (a) student; (b) enrollment service/advising; (c) department head/advisor; (d) assessment center; and (e) registrar. Figure 6 shows the cross-functional flow chart for College B.

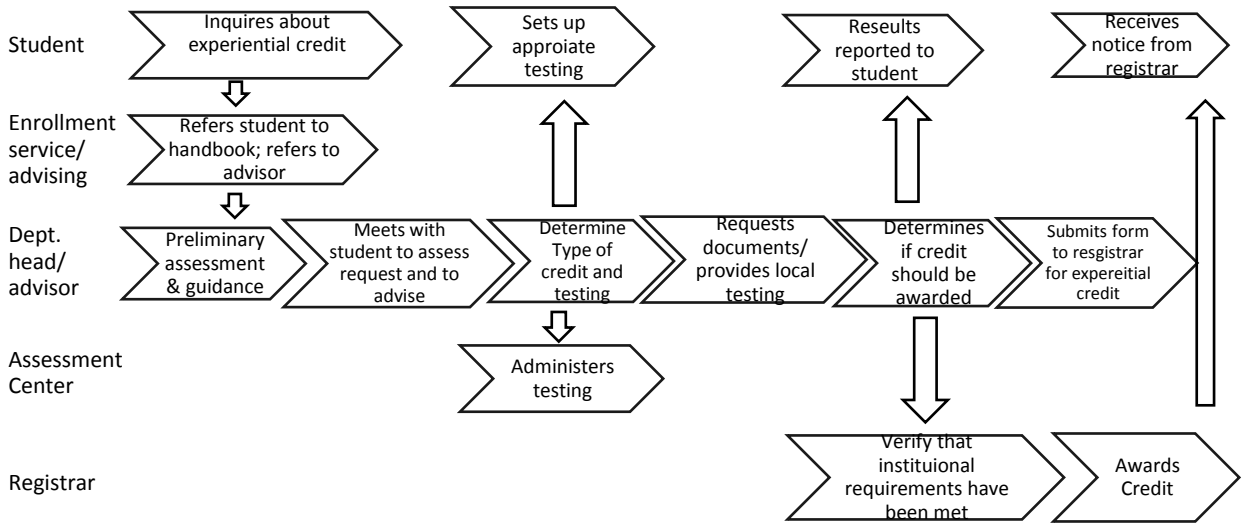

Figure 6. College B: PLA cross-function flow chart.

College C examined departmental action plans and processes based on the following categories of types of transcript and advanced standing, (a) college; (b) Advanced Placement (AP); College Level Examination Program (CLEP) and International Baccalaureate (IB); (c) military; (d) international college; (e) technical advanced placement, exemption exams and work/education experience. The action plans identified inputs and outputs for the applicant/student, data coordinator, and department head/program coordinator as summarized in Figure 7.

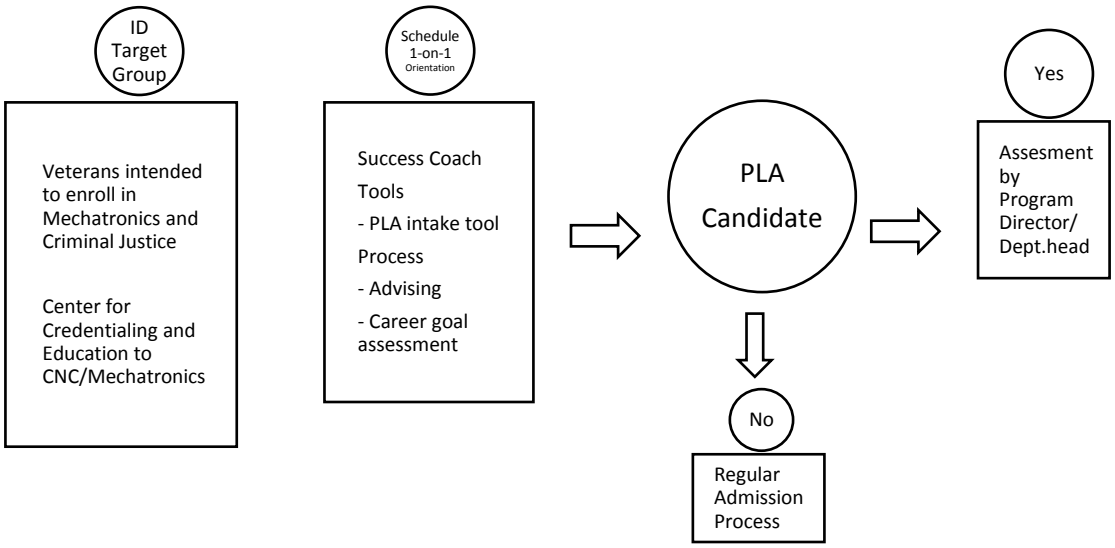

Figure 7. College C: PLA flow chart.

Each campus worked to complete and refine the process map throughout the duration of the study.

Webinar series. The AR team decided the next intervention would be a webinar series. The webinar series was divided into four sessions: one that all campus representatives attended, and three that were role specific. The delineated roles for the webinars were (a) staff and administration, (b) faculty, and (c) student support professionals. The webinar series was facilitated by the CAEL consultants, with the AR team contributing to the planning and presentation materials. The webinar agenda items included aligning PLA with institutional missions, PLA background & research, PLA options, roles and responsibilities, assessment, and advisement. Table 17 shows more details of the content reviewed in each webinar. While planning for the webinar series, the AR team was also collecting data to inform the creation of a marketing plan.

Table 17

Webinar Focus and Topics

Role	Topics
Administration & Staff	• Why PLA is Important • Testimonial from Faculty on Using PLA • Scope and Processes • Demystifying Language • Background and Research • Next Steps for Campus Teams
Faculty	• PLA and Faculty as Small-Medium Enterprises • Faculty Concerns • Faculty Responsibilities • PLA Options • Effective Assessment
Student Support Professionals	• Process Facilitation • Advising • Handoffs and Internal Customer Services • Intake Tool • Marketing • Institutional Research

Marketing plan. The marketing plan was developed to help guide and promote campus and external awareness of PLA services offered at each college. The AR team worked with campus marketing officials as well as with CAEL consultants throughout the duration of the study, to produce a concise marketing plan. Two sessions were facilitated by CAEL, with representatives from the respective campuses to specifically develop the plan. The purpose of the marketing plan was to explore options to expand the use of PLA to improve adult college completion at the three colleges. The marketing plan outlined target audiences and messages for PLA, including employers and veterans. The plan also identified several communication vehicles for outreach to adults about PLA, including online advertising, local newspapers, email, radio

and special events. In response to the development of the marketing plan, Kim said, "*I feel much better with this marketing piece. We have the piece to make a completed puzzle; we have actually been able to gain the support and tools to make this a viable asset to each of these colleges.*"

The specific objectives of the marketing plan presented by Doyle (2016) included (a) increase PLA participation and enrollment, especially in manufacturing programs; (b) increase participation in PLA by current students; and (c) increase enrollment and participation in PLA by veterans, students who have been away from studies for more than 6 months, students who have completed quick job programs, and local workers in the manufacturing sector.

Though the marketing plan will serve as a good resource, the sentiments of the AR team were that campuses were not ready to execute the marketing plan. Lisa shared,

> *We can't move forward with marketing until we have a lot of our practices and policies in place. We can't market something we don't have the capacity to actually make happen and not to say that we can't do part of this as we go along.*

Since work was still being completed on solidifying campus PLA infrastructures and processes, all three campuses delayed full implementation of the marketing plan during the timeframe of this study.

Evaluating Action

The AR Team met to discuss the progress to date on the initiative. The team expressed enthusiasm regarding the success of the Professional Development Day and webinar series. Gary stated,

> *I am most proud of the internal team and how they have performed their work . . . that is, what makes me proud is to see individuals be able to put the passion of what they do in their work into this project.*

The team felt that they were gaining greater stakeholder support and was pleased with the progress they were able to make within a brief period of time. This concluded the first AR cycle. Beyond this point, the external consultants from CAEL no longer worked with the AR team.

Cycle 2: Creating a Frame

When continuing to figure out how to put a puzzle together, one typically builds up the frame and gets a clear understanding of boundaries. In Cycle 2 of the project, the team determined the frame and boundaries in order to better understand outcomes and solutions. In Cycle 2, the CAEL consultants no longer collaborated with the AR team, and therefore, as the researcher I felt the need to reset team expectations and deliverables to reach the desired future state of the project. I acknowledged the importance of moving forward with the work, and the AR team agreed to be committed to this initiative through fall 2016. During this meeting I stated:

> *There is not much research around full PLA implementation so this is really unique to this action research project. I want to commend you on the progress thus far, but I also want to offer to the team myself as a resource to help you navigate barriers, challenges or other strategies needed to help you be successful with this work.*

The team felt that much more progress could be made and that additional time could expand the scope of inquiry. Regarding the team's engagement, the members agreed to continue to meet monthly by telephone conference and would assess the progress as the project moved forward.

Constructing

The AR team continued to explore ideas for interventions to fully support PLA implementation. After evaluating the work accomplished to this point, the AR team inquired and

discussed the best approaches for moving the work forward. The AR team discussed the need to reconvene their campus team. The campuses had not yet reconvened with the teams that were created for the January 2016 Professional Development Day. Reconvening the team would help to solidify roles and refine the work on the process mapping in order to streamline policies and processes. While understanding the path forward for the remainder of the project I shared:

> *This AR team has already progressed with the work that began in November 2015 when this collaboration started with me and CAEL. However, based on the discussion, it is apparent to me that the learning and development of PLA campus advisory teams will be critical to PLA implementation. What systems can you create to reengage with those teams to understand their commitment to the work, and get a grasp of the process mapping data points? What have you learned since January 29 when the team met, is the process mapping working, did you learn something different?*

The AR team agreed that reengaging the PLA campus advisory teams on a consistent basis would be beneficial to their PLA implementation goals.

Another intervention the AR team realized was needed was creating an assessment plan. This addition came from the AR team's desire to identify success measures early in the implementation process. Gary offered a recommendation to refine my proposed plan on the measures of success, "*I like how you (researcher) have guided us to think about the measures of success. This made me realize that what we need to do is create a comprehensive assessment plan*." The iterative process of AR and theoretical framework underpinning this study compels multifaceted interventions. The assessment plan would help to clearly define performance measures that would show PLA implementation success.

Planning Action

The AR team decided to implement a schedule to meet regularly with their respective campus teams. The campus teams would continue to refine the process map and work toward initial steps to implement the marketing plan. Lakin et al. (2015) assert that "building a sustainable infrastructure involves multiple areas, from information sharing, integration of services, and faculty engagement to policy review and data collection" (p. 25). The campus teams would also solicit measures to be included in the assessment plan to measure project success.

Taking Action

The AR team decided on two interventions during Cycle 2, including reconvening the campus team and creating an assessment plan. Table 18 outlines the outcomes of the interventions.

Table 18

Cycle 2: Intervention Plan

Focus Category	Intervention	AR Team Activities	1. Anticipated Outcomes 2. Connection to Problem	Timeline
Infrastructure, policies/ processes	Reconvene campus team	Meet with key stakeholders from cross-functional departments to work together to expand PLA policies and practice.	(1) Determine opportunities, challenges, and barriers at each college. (2) Put people in place to manage PLA-related programs and services.	Apr. 2016 – Oct. 2016
Infrastructure, policies/ processes	Assessment Plan	Identify measures, goals, targets, and outcomes.	(1) Use knowledge to integrate, sustain, and evaluate PLA practices.	Apr. 2016 – Oct. 2016

Reconvene campus team. The AR team collaboratively agreed that reconvening the individual campus teams would help move along the process in PLA implementations. Reconvening the campus team allowed each participant to gain deeper understanding of effective processes and practices. Moreover, it provided direction to AR team members on how to lead their teams. Throughout this process, the AR team members constantly had revelations about something new that they had not thought about in regard to implementing PLA. Once they reconvened with their teams, more pieces of the puzzle were discovered and uncovered. Kim exclaimed,

> *This is a big puzzle. I have some of the pieces together, but we don't have enough pieces together to build a picture so that everybody can see it. I don't even have the big picture, I don't think. Every time I think we have it together, and then we find another component that needs to go in, or that is essential to having it work most effectively, to present it so that everybody else can see the clear picture as well*.

During this cycle, it became more apparent that the campuses were progressing at various rates in regard to reconvening the team. Table 19 shows status of reconvening the campus teams from May 2016 to June 2016.

Table 19

Progress of Campus Teams Reconvening

Institution	May 2016	June 2016
College A	*"We have not met."*	"*We haven't met, and let me tell you why—we have another person on staff, and her sole job is PLA . . . she is our point person on campus to lead us through PLA. She is assembling a team."*

Institution	May 2016	June 2016
College B	*"We will have our kick-off meeting in the next two weeks."*	"*We met, we went through and decided what departments were involved and who the owners of this activity were, and clarified that. We also spent some time talking about our purpose, why we were doing this, the outcomes we wanted, to get everyone on the same page about the values, some of the gaps, and why tasks are important to close gaps."*
College C	*"We have had a team meeting where we identified our PLA guiding principles, how it relates to our student experience."*	*"We have had two group meetings since our last phone conference, the last meeting yesterday. The group has made a good bit of progress. At this point we are getting together on a monthly basis to check in on each group members' assigned task."*

Assessment plan. The purpose of the assessment plan was to understand the measures, goals and outcomes of successful implementation of a robust PLA system. In discussing whether or not to create an assessment plan, Cathy stated, *"An assessment plan would be important if you are actually going to start an initiative. It would be nice to know if it is actually working."* This plan served as a blueprint on how to integrate PLA processes, improve service to students, delineate responsible parties, and identify measure targets. The AR team decided on the following first-level measures to determine progress toward success:

- Number of students served
- Number of students creating a PLA profile
- Number of students enrolled in a program in which a PLA profile was created
- Number of PLA credits awarded

The AR team worked collaboratively to agree on measures that would be applicable to all three colleges. Each campus agreed to share the assessment plan with their campus teams, and the plan would be used as a guidepost on progress.

Evaluating

The AR team shared the assessment plan with the various project stakeholders. The stakeholders provided feedback, and revisions were made as necessary. As the researcher, I updated the CAEL consultant, Trina, who was no longer working with the AR team on the team's progress. I shared the assessment plan, and her response stated,

> *One thing that gives me hope is the fact that they are doing the data collection and have come up with a data collection system, because if they are not able to show that any of this matters, through the data, it's not going to help, and certainly if they can show it through data, then it will definitely help to make sure there is full campus implementation. It is usually something people don't think about ahead of time. On the checklist CAEL uses, its number six. Most of the time, people are so far in the details they forget about the data. So the fact that they did work an assessment plan, that's going to make a huge difference."*

All campuses represented on the AR team begin to have regular meetings with the campus advisory teams. The work has continued to progress as various pieces of the puzzle are completed.

Cycle 3: Fitting Together

Puzzles consist of interlocking pieces that connect with one another. When individuals are engaged and teams work in their strengths, collaboration interconnects to form a whole. The third cycle in this project demonstrated the collaborative effort and progress made by the AR team.

Constructing

During a meeting held in August, the AR team suggested making a presentation to other peer intuitions on progress made up to this point toward PLA implementation. Additionally, I shared with them a research report by Lakin et al. (2015) that discussed various stages of PLA implementation including (a) new/emerging, (b) developing, and (c) effective practices in the categories of faculty engagement and development; student outreach and support; and infrastructure, policies, and processes. The team found this very useful to help them gauge their own progress.

Planning Action

Three of the AR team members were planning on attending an upcoming chief academic officers (CAO) board meeting with peer institutions of other public community and technical colleges throughout the state. The AR team collaborated and planned talking points to share what had been learned about implementing PLA and where they currently were in implementation. Lisa shared,

> *We still have the opportunity to share some good work and share some good practices that our work will then go forward into other areas. I feel like we have come to a point where all three colleges are doing good things and are on the same lines because of how the collective teams worked together*.

Moreover, the team decided that it would be a good idea to use the Lakin et al. (2015) framework to better understand their own progress as well as the progress on PLA implementation at peer colleges that were not participating in this project. To successfully create an opportunity for benchmarking, the principal investigator and the researcher worked to develop an assessment using the PLA implementation framework by Lakin et al. (2015) into a survey that could be

completed by each institution represented at an upcoming board meeting. Once the assessment was developed, each AR team member completed it to see if it was accurate based on their own self-assessment. During an AR team meeting, discussion and reflections were shared on the specific stages and progress of the three colleges. The following scale was used to assess the stages of implementation:

- 1, not really descriptive of our institution
- 2, sometimes true of our institution
- 3, somewhat true of our institution
- 4, very true of our institution

The AR team made a few edits to the assessment to prepare it for dissemination at the CAO board meeting. The CAOs in attendance at the board meeting were asked to rate their institution, selecting the ranking that best fit where the institution stands at that particular time in implementing prior learning assessment. Table 20 shows the areas of focus from the assessment adapted from the Lakin et al. (2015) framework.

Taking Action

As a final intervention, the change team presented their work with fellow peers in the same leadership capacity at other community colleges within the state. Along with this presentation, the AR team assessed other peer institutions' implementation of PLA by administering the Assessing Your Stage of Implementation on PLA assessment during a state board meeting.

Table 20

Assessing Your Stage of Implementation of Prior Learning Assessment

Item	Not really descriptive of our institution 1	Sometimes true of our institution 2	Somewhat true of our institution 3	Very true of our institution 4
Faculty engagement and development				
1. Formed advisory group to study and craft policy and practice	1	2	3	4
2. Attended conferences to learn more	1	2	3	4
3. Invites experts to provide overviews of PLA to faculty	1	2	3	4
4. Created venues for information sharing across institutional constituencies and committees	1	2	3	4
5. Involved faculty groups in developing and vetting policies/practices, such as crosswalks, mapping, and articulations	1	2	3	4
6. Provided professional preparation for faculty and staff, including participation in conferences, research, and writing	1	2	3	4
7. Encouraged faculty to include PLA activities in annual reviews and promotion/tenure evaluations	1	2	3	4
8. Implemented incentives and areas of recognition	1	2	3	4
Student outreach and support				
9. Academic advisors and program coordinators help direct students to current PLA options	1	2	3	4
10. Shares some information on website and uses other venues to communicate with students such as orientation and advising	1	2	3	4
11. Informs students of PLA options prior to admission as well as when they are admitted	1	2	3	4
12. Provides expert advising about prior learning assessment and uses all types of communication tools to share information with students (social media, website, orientation, and more form outreach with potential students to graduation)	1	2	3	4
Infrastructure, policies, and processes				
13. Scans the landscape for current and informal institutional PLA practices	1	2	3	4
14. Seeks policy and practice models among peer institutions	1	2	3	4
15. Expands current policy and practice	1	2	3	4
16. Puts people and structures in place to manage programs	1	2	3	4
17. Begins to coordinate PLA-related programs and services across administrative student service, and academic spheres	1	2	3	4
18. Selects appropriate PLA tools that match institutional context and curriculum and recognizes diversity of learners and their experiences	1	2	3	4
19. Promotes active use of PLA in all degree areas, including major requirements, General education	1	2	3	4
20. Well established policies and practices promote effective PLA program and administrative management	1	2	3	4
21. PLA is embedded within other programs, such as competency-based learning	1	2	3	4

Table 21 shows the interventions for Cycle 3.

Table 21

Cycle 3: Intervention Plan

Focus Category	Intervention	AR Team Activities	1. Anticipated Outcomes 2. Connection to problem	Timeline
Infrastructure, policies/processes	CAO Board Presentation	Share progress or Charter Team work.	1. Determine opportunities, challenges and barriers at each college	Apr. 2016 – Sep. 2016
Infrastructure, policies/processes	Assessing Stages of PLA Survey	Administer survey to peer institutions.	1. Understand the progress of institutions on various aspects of PLA implementation 2. Use knowledge to benchmark progress	Sep. 2016 – Dec. 2016

Evaluating Action

To evaluate action and work accomplished throughout this project, the AR team calculated and reflected on the results of the Assessing Stages of PLA Implementation survey. Debriefs of the CAO meeting and critical incident interviews were conducted with members of the AR team to evaluate this cycle of the research. The team was proud of the results and progress they have made in comparison to peer institutions on PLA implementation.

Results in Table 22 and Figure 8 show that the colleges participating in this action research project were much further along in implementing PLA than colleges that did not participate in this project. AR team members expressed their satisfaction with seeing the progress made over the course of this project in comparison to other institutions.

Table 22

Results of Assessing Stages of PLA Implementation

	Emerging	Developing	Effective
PLA Charter Colleges	6.00	6.55	4.42
Non-PLA Project Charter Colleges	3.15	3.50	3.00

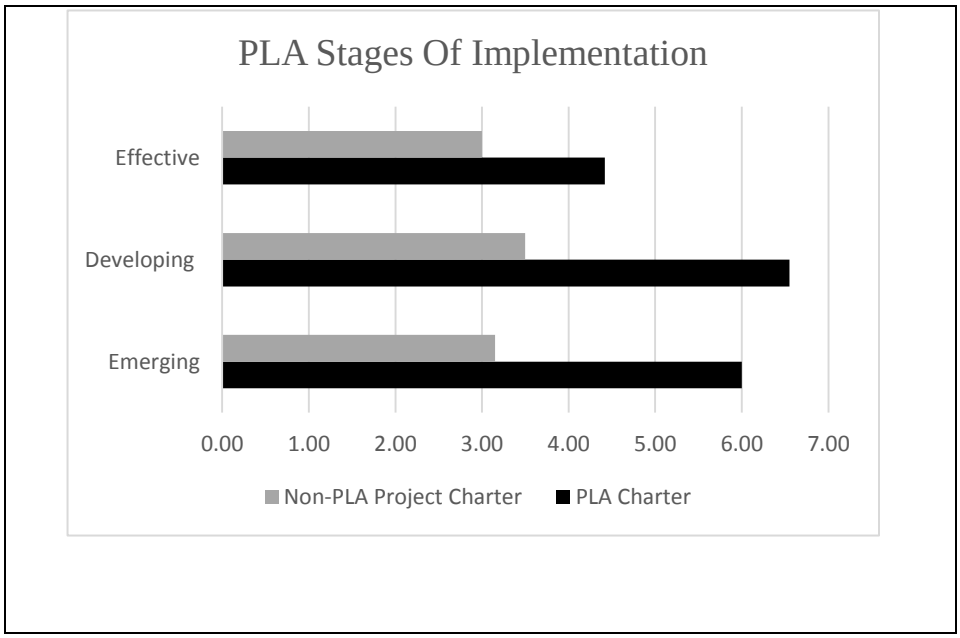

Figure 8. Results of Assessing Stages of PLA Implementation survey.

In reviewing and reflecting on the results, Cathy exclaimed,

> *This is great; we have made progress, and we have even more forward progress to make. We see we have movement for some of the things that are emerging into developing or effective, and we need to continue to move further along that path. I don't want to lose our momentum on what we are doing.*

Similarly, Gary noted,

> *I think it shows the work that has been done has certainly paid off in the ability of the three colleges to better and more effectively use these tools or these sets of tools. So that*

should be a payoff differentially in the way that we serve our students. It is pretty clear that the Project Team perceives that they are in a better state of affairs as it relates to PLA than those that didn't participate, in both effectiveness, things that are in the works, and things that are emerging—which shouldn't be too surprising because this group has been working on this while others felt like it wasn't an area of priority.

Benchmarking the work accomplished from the participating colleges highlighted the movement made in implementing PLA. The results made the AR team very proud of the work achieved thus far.

Critical incident interviews. At the conclusion of the last AR team meeting, the researcher followed up with the AR team members to conduct individual critical incident interviews. The critical incident interviews allowed reflection on observations throughout the research and activities of the AR team. Critical incident interviews were used to gain deeper insight into the observations from the AR team members in implementing PLA on their respective campuses. Table 23 shows the critical incident protocol.

Table 23

Critical Incident Protocol

Critical Incident	Prompt
I.	Using the categories of the Healthy PLA Survey, plot and discuss, on a scale from 1 to 5, each dimension of where you are now in this area and what ways you have improved or changed.
II.	Tell me about facilitators of disseminating and institutionalizing PLA at your institution. A. When you look back at this situation, did you have any assumptions, beliefs or values that may have affected the way you responded?

Critical Incident	Prompt
III.	Tell me about barriers to diffusing PLA practices on your campus. A: What was it about this event that made it seem significant? B: What conclusions did you draw from this incident?
IV.	Tell me about a specific time when you had a turning point in learning from participating in the PLA Charter Team. A: What was it about this event that made it seem significant?

Policy updates. An additional outcome of working on this AR project was each campus worked to update their PLA policy and procedures. These updates would be reflective of the learning that occurred throughout this process on best practice.

College A. College A revised the campus Exemption of Courses (Prior Learning Assessment) policy and procedures in October 2016, which was an expansion of the existing Transfer of Credit policy. The Transfer of Credit policy only outlined the types of credit that could be transferred, including college, foreign or military transcripts, and standardized exams such as Advanced Placement (AP), International Baccalaureate (IB), CLEP and DANTES. College A felt the need to expand on this policy through the revisions on the Exemption of Courses policy and procedures, which further details clarity on rationale, purpose, scope and roles and responsibilities for the PLA Advisory Team, as detailed in Table 24. Additionally, College A defined the types of exemptions that can be awarded, including (a) substitution, (b) articulation with non-credit course work, (c) waiver of prerequisites, (d) professional certifications, (e) business and industry experience, (f) military training (g) portfolio, and (h) standardized exams as mentioned previously.

Table 24

College A: Exemption of Courses PLA Policy Highlights

Category	Definition
Rationale and Purpose	• Establishes the parameters for the evaluation of the skill sets, industry credentials, certifications, previous non-traditional learning, and military training • Provides students the opportunity to earn college credit for college-level learning which occurred outside the college classroom • Validates knowledge and skills through examination or verified documentation that may allow qualifying students to receive credit
Scope	• Recognizes both traditional and non-traditional learning • Awards credit to currently enrolled students who can document learning that is substantially equivalent to a course needed for completion of a particular degree, diploma, or certificate.
PLA Advisory Team	• Responsible for integrating and sustaining PLA processes to include maintenance of the policy and procedures. • Provide oversight and recommendations on PLA documentation and strategic marketing.

College B. College B updated their Credit for Prior Learning (CPL) policy in October 2016 from a September 2014 version. Revisions included clarification of the title and definition from exemption credit to credit for prior learning, as well as updated explanations for technical advanced placement, professional certifications, and credit by portfolio. Table 25 shows changes reflected in the policy revisions for College B.

Table 25

College B: PLA Policy Revisions

Category	September 2014	October 2016
Title	Exemption Credit	Credit for Prior Learning
Definition	n/a	CPL is a process whereby skills and knowledge earned outside a traditional classroom are evaluated for the purpose to award credit. Types include exemption credit, articulated credit, and experiential learning.
Technical Advanced Placement (TAP)	n/a	Students may receive exemption credit for program requirements through the validation of competencies gained at secondary schools.
Professional certifications	Students may receive credit for professional certification.	Students may receive articulated credit for professional, industry-approved certifications.
Credit by Portfolio	n/a	Students may receive experiential learning credit for knowledge acquired through work or other experiences external to academics through development of a portfolio documenting those experiences.

College C. College C is working to update the campus policy on Curriculum Program Admission with Advanced Standing for approval by Fall 2017. This policy includes information on PLA. Updates will include further expansion of credits awarded and provide greater clarity of PLA guidelines to award credit for college-level learning.

The strides made by each of the three campuses participating in this study are significant in moving toward implementing a robust PLA system. All colleges worked to update their websites to ensure that PLA policies were clearly articulated and accessible. Gaining buy-in

from various levels within a campus is needed to provide the necessary infrastructure and training around the skills and knowledge needed for successful implementation.

Summary: Building on One Another

There are three AR cycles in this study designed to understand implementing a robust PLA system at three community colleges. Four steps in the AR cycle are constructing, planning action, taking action and evaluating action. In this study, the three AR cycles were:

- Cycle 1: Producing order by focusing on convening relevant stakeholders, providing professional development, and focusing on outreach and process infrastructure strategies
- Cycle 2: Creating a framework to measure goals and outcomes in order to assess progress
- Cycle 3: Fitting together the collaborative work of the AR team to understand progress

The process of putting a puzzle together is to have an overall view of the whole picture. One has to be able to understand strengths and challenges. Combining pieces and understanding how and where they fit is critical to having a completed puzzle. In this project, the AR team worked to figure out the pieces needed for institutionalization of PLA practices. Along the way, there were missing pieces, but the team worked to find and fit together pieces toward completing the puzzle. Cathy expressed,

> *Most colleges have all the pieces to do PLA fairly well; they just have some gaps. It is not purposeful, it is not guided, it is almost accidental and random, and if you take those pieces and align them and put them into a program format, that this is how we operate more upfront, purposefully, you can make strides.*

The team in this study made many strides and had successes toward full PLA implementation. The implementation occurred during the "taking action" phase of each of the AR cycles. The interventions were problem-focused around best practices of implementing a

robust PLA system. Kasworm (2003) states that the future for positive experiences will rely on reflective leaders and practitioners who continue to redefine the educational setting to best serve adult learners. Lisa stated,

> *From the beginning of this project the AR team made a commitment to better serve adult learners by working toward implementing a robust PLA system. This project provided an infrastructure for us to get started. The Charter Team helped us get down the road and kept the work in front of us. The only thing between us and greatness, is the work we decide to put into it.*

To date, campus teams are continuing to refine the strategy of all interventions. The charge for continued work includes (a) implementing the action plans, (b) continue to define sustainable practices and policies for a scalable PLA model, (c) integrate marketing, (d) encourage continued professional development, and (e) build champions across campus for the work. The researcher, AR team, and CAEL had the opportunity to collaborate in assisting community colleges to implement sustainable PLA practices and policies to promote adult college completion.

CHAPTER 5

FINDINGS

Qualitative analysis transforms data into findings. The purpose of this action research case study was to explore how community college leaders implement strategies to effectively diffuse prior learning assessment (PLA) practices to promote adult college completion. Sponsorship from a state consortium of institutions afforded opportunities to understand how community colleges implement prior learning assessment practices. This chapter presents data collected from action research team meetings, observations and individual interviews. Through data analysis, the findings presented here are organized by an endeavor to answer the study's three research questions:

1. How do community college leaders effectively diffuse prior learning assessment (PLA) strategies to promote adult college completion?
2. What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of PLA practices in community colleges?
3. How do an external diffusion group and lead researcher support fidelity of PLA implementation in an action research study?

This chapter includes a discussion of key findings from the analysis of data resulting from interventions that were implemented during this AR study. It contains three sections, which address the findings for each research question.

The AR team generated data from team meetings, casual conversations, incidental observations, and organization documents. The data were coded and analyzed using the constant

comparative method. To compile common strategies, coded data were derived from participants' own reports of the challenges and opportunities they faced, asked during AR team meetings and individual interviews. Table 26 shows the themes that emerged upon analysis. Examples of comments from participants are presented to illustrate their perceptions for each of the categories.

Table 26

Research Findings

Research Question	Findings from Data	Subthemes
1. How do community college leaders effectively diffuse prior learning assessment (PLA) strategies to promote adult college completion?	Community college leaders engage cross-functional stakeholders.	Distributed leadership
	Community college leaders disseminate knowledge to solidify institutionalization.	Effective communication
	Community college leaders strategically align the innovation to the mission and vision of the college.	Organizational commitment
	Community college leaders implement more structure and systems to simplify the process.	Process improvement
2. What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of PLA practices in community colleges?	*Individual*: Community college leaders understand how their leadership empowers others to lead change.	Influence Positionality
	Group: Community college leaders are intentional about benchmarking progress in order to recognize gaps and opportunities.	Continuous improvement
	System: Community college leaders recognize the importance of outreach and marketing for successful implementation.	Access Engagement
3. How do an external diffusion group and lead researcher support fidelity of PLA implementation in an action research study?	An external diffusion group and lead researcher support fidelity of PLA implementation through distributed leadership.	Collective voice Shared learning Collaboration

Research Question #1: How Do Community College Leaders Effectively Diffuse Prior Learning Assessment (PLA) Strategies to Promote Adult College Completion?

The community college leaders who participated in this study were asked on various aspects of implementing PLA on their respective campuses. Probing questions inquired what were facilitators and barriers of diffusing PLA on campus. Each respondent discussed various dynamics within the college that changed during the course of the study, both structurally and resultant from the study interventions. Areas of focus included policy and procedures, academic criteria, assessment, infrastructure and oversight, and research. These responses were consistent with researcher observations and field notes. Additionally, participants indicated that further changes in implementation may occur with improved infrastructure for sustaining PLA brought on by the study. Four overarching themes related to how community college leaders diffused PLA strategies emerged. These themes include cross-functional engagement, disseminating knowledge, aligning PLA with the mission and vision of the college, and simplifying structures and processes. Table 27 highlights the findings for the first research question.

Table 27

Characteristics of Diffusing PLA

Research Question	Findings from Data	
1. How do community college leaders effectively diffuse prior learning assessment (PLA) strategies to promote adult college completion?	Community college leaders engage cross-functional stakeholders.	Distributed leadership
	Community college leaders disseminate knowledge to solidify institutionalization.	Effective communication
	Community college leaders strategically align the innovation to the mission and vision of the college.	Organizational commitment
	Community college leaders implement more structure and systems to simplify the process.	Process improvement

To determine findings, assertions were made from responses from participants during the critical incident interviews. Table 28 highlights some of these assertions as related to the first research question. A narrative supporting these assertions is provided.

Table 28

Research Question #1 Critical Incident Assertions

Interviewee	Title	Assertion
Cathy	It's difficult to improve a cross-functional process	Multi-faceted implementation is difficult when it is not one person's sole responsibility to make it work.
Gary	Shared co-creation	When a team actively contributes and is invested in creation of the processes, they assist in diffusing the innovation.
Ed	In front of the right audience	Ensuring that the right opinion leaders are at the table is a key to diffusion.
Lisa	Its better if faculty own it not me	Opinion leaders should be decision owners.
Lisa	Disseminating knowledge solidifies institutionalization	Understanding and connecting to external stakeholders needs is important to ensuring successful implementation.
Ed	How it was done was really apples to oranges	Acknowledging complexities will allow for the development of more streamlined and clearer processes.
Cathy	Having good conversations	Working cross-functionally to understand the needs and questions of various stakeholders helps to eliminate ambiguity.
Lisa	Threading this in the organization	Diffusion should occur throughout every facet of an organization in order to have beneficial and sustainable results.
Cathy	We periodically bumped into our own policy	Policies that are ineffective hinder successful outcomes.
Lisa	We need to build the building before we put people in it	Processes and procedures can be ambiguous, but should be improved before gaining buy-in from others.
Cathy	Putting a little bit more structure in place	More structure makes it easier for faculty and staff to understand and use practices to award credit.

Engage Cross-Functional Stakeholders

A strategy that permeated this action research study was the need to create a PLA campus advisory team on each campus. The AR team thought it would be best for these teams to be comprised of various cross-functional roles. Roles sought to serve on the PLA advisory team included leaders from various functional areas including registrar, financial aid, student services, and department chairs. When understanding the complexity of engaging various stakeholders in campus-wide PLA implementation, Cathy stated, "*You are trying to improve a process that is very cross-functional and that involves a lot of different groups at the college*."

Distributed leadership. Collaborating with individuals across various roles and departments is important to implementing PLA. In this study the AR team leveraged the organizational structure to help diffuse PLA strategies through the various cross-functional leaders that served on the PLA campus advisory team. The AR team collaborated throughout the duration of the study to work with various stakeholders that served to get work accomplished. It was important for leaders of various campus functions to be involved in this process in order to take ownership and ensure necessary actions were taken for successful implementation. Gary stressed the importance of collaboration with the cross-functional team:

> *One of my values is that teams do much better work. Forming this team where every individual had defined roles and responsibilities and shared ownership of the outcomes and shared co-creation of the products, they quickly communicated that to their stakeholders. When you are creating a team that helps achieve goals, you come up with an outcome that far exceeds the project's expectations. Therefore, the dissemination of information is just an outflow of the team's work. I have looked at it through that lens and I think it has been powerful for the group as we have collaborated and discussed the appropriate use of PLA.*

Through cross-functional collaboration, the AR team's ability to diffuse PLA was supported through the distributed leadership of PLA advisory campus teams. Working cross-functionally to understand the needs and questions of various stakeholders helped to guide the work. Ed discussed the coming together of the PLA advisory team during the PLA professional learning day:

> *Our goal was to put a working plan together. We had our senior VP, our representative from the registrar, someone from admission, an advisor director of marketing, and myself. We have different roles and different pieces of leadership from the college coming to support PLA. This was a turning point.*

Similarly, Lisa shared this sentiment around distributed leadership for the PLA advisory teams:

> *So, you have got to have people involved who are making the decisions, and they are the ones who are ultimately deciding whether we are going to be awarding PLA, so they ought to be the ones deciding how the procedures are going to be to do that. That is what I see this committee doing. I see them owning PLA. We may have a PLA Coordinator, but the processes themselves are owned by this advisory committee.*

The AR team understood the importance of building the leadership capacity of the PLA advisory team to serve as champions for diffusing PLA. Lisa shared how the PLA advisory team was also empowered to assist in leading the effort:

> *The advisory committee is where the procedures for PLA reside. I could sit in this office and say yeah, we are going to do that as a leader, but it's much better for our faculty to evaluate that and see how it's going to be done, put it in the procedures, talk about it. Others will buy in from the advisory's influence and ability to lead change. So, you have got to have people involved, including faculty. The advisory committee owns PLA. I may*

lead the project, but the processes themselves are owned and diffused by this advisory committee.

Likewise, Gary described this notion of how as a leader he empowered his team to also lead:

The project team members empowered the advisory team, who have taken on the responsibility of training their units to successfully adopt PLA. Our student success representative has consistently educated the success coaches on their role. The registrar and student data representative have done the same. Our marketing department helped to develop a marketing communications plan. For every element that was part of PLA that we identified, those individuals in the team have taken on, as part of their roles and responsibilities, communicating and training those individuals and their related roles on what to do and what we are doing.

The PLA advisory teams were invested in the creation of the processes which assisted in diffusing PLA. Moreover, engaging cross-functional team leaders was critical to diffusing PLA strategies at all three campuses.

Knowledge Dissemination

Sharing knowledge and connecting to external and internal stakeholders was also important to ensuring successful diffusion of PLA. The AR team in this study sought opportunities to share information so that potential adopters were made aware of how the innovation would be used and the problems that it solved. AR team members intentionally identified opportunities to share information about PLA with critical stakeholders. This sentiment is expressed by Lisa:

I was at the criminal justice advisory committee, and PLA was actually on their agenda, to describe what the college was doing, how we were moving forward, and to make sure the committee knew that these options were available to members, including their

incumbent workforce that may want to come back to further their education. This was key. I also went to the accounting advisory committee, and they had our PLA coordinator on the agenda to talk about what PLA is and how it offers advantages to our students and how our college is moving forward. Not only are we disseminating information about PLA within the college, but we are doing it within the community, gradually. This solidifies the institutionalization of PLA at the college. When I look at growing facilitators of this, as it's disseminating, this was a proud moment, I'm thinking, this may actually work. We are actually getting this knowledge out there. It began to validate that we can do this, it is happening.

The AR team members understood the importance of knowledge sharing with critical influential stakeholder groups. An important component of disseminating knowledge was communicating what PLA is and why its successful implementation is important to the college.

Communication. Effective communication was a strategy that has enabled the diffusion or PLA implementation throughout this study. This communication strategy included updating the website, promotional documents, and collateral useful to helping faculty, staff and students better understand PLA. Ed reflected:

The overall process was there, but we just needed more communication. For example, put it on the website for faculty and staff to know and understand from the different academic divisions and from the registrar's standpoint in terms of working with PLA. We had to go through this to get to a point where we were ready to move forward.

Many times, effective communication was having the right conversations with the needed stakeholders. This sentiment is supported by Cathy:

We had some really good conversations with stakeholders. It occurred to the registrar that people wouldn't know or that anyone might want to see those crosswalks, it never occurred to her that it might be a good thing to put out there almost as a marketing tool and to raise awareness. Similarly, the conversation in admissions, how would they know to ask these questions and steer students to ask about PLA. We had conversations with information technology and marketing. It was good crosswalk of sharing information with different roles at the college, and I think that was important for making PLA something that everyone could buy into.

The sharing of knowledge by the AR team developed a sense of need for PLA. This awareness allowed various stakeholder groups to become more involved and seek information on how PLA might best benefit various constituent groups to lead to positive outcomes.

Mission and Vision Alignment

The AR team sought to align the purpose for implementing PLA with the mission of the college. Through the work of diffusing PLA throughout systems and process, the AR team recognized that for the strategy to be sustainable it must become a part of the college's operations. When reflecting on facilitators of disseminating PLA, Lisa stated:

We got all of these elements, but PLA is not a part of our DNA. If we do not thread this through everything that we do, and do not make PLA a part of the culture that we expect, accept, recruit for, and want to be engaged with, it's not going to happen, it's not going to be beneficial, it's not going to be the life blood for some of our students that it could be. This is enormous; I realized the importance of PLA to the overall culture of the college. When I look at our college, and take into account our mission of "affecting economic development through personal growth and learning," you know we are doing that through PLA. To me that is evident of PLA becoming a tool in our tool box, that

now, not only are our department heads coming out, but they are making sure our students and community know about it as well.

Similarly, Kim elaborated on the thoughts presented during an AR team meeting:

PLA has to be a part of our culture, it has to be in our DNA. The entire college community must understand how PLA helps the student and supports recruitment, retention, and completion. Students stay at our colleges because they feel like they have a purpose, and if you have PLA in the DNA of your college, students feel like you are actually looking at them as a person, as opposed to just a number, and making them feel connected to the college community to encourage them to achieve their completion goals.

College A developed a handbook for accessing and awarding PLA credit that was published in April 2017. This handbook serves as a guide to students, faculty and staff, and administrators on how to implement a quality assurance approach when awarding PLA credit. Creation of this handbook helped to institutionalize PLA practices in order to provide clear support of how PLA encourages accomplishment of College A's mission.

The work of the campus advisory team at College C led to the development of guiding principles aligned to the college's mission and strategic plan specifically aligned to the student experience. The student experience for College C focuses on providing exceptional opportunities for learning, achievement, and growth, serving students well through challenging educational programs, and building a strong sense of community where students enjoy spending time and can say with certainty that they matter. The tenets of the student experience that helped to guide principles of successfully implementing PLA are found in Table 29.

Table 29

College C: Alignment of PLA to Mission and Strategic Plan

Principles	Description
High Standards	• Review transcripts prior to entry into program • Create standards of work for PLA • Provide continuing opportunities to demonstrate work/competencies • Perform competency/student learning outcome (SLO) at the same level as a "traditional path"
Investing in Each Other	• Assess impact on aid • Provide comprehensive advising focused on a holistic/complete view of the student • Deliver competent customer service invested in helping the student • Offer professional development for faculty and staff
Open, Authentic Communication	• Clearly communicate the process • Strive for continuous improvement • Explain all aspects of PLA to the student (i.e., Financial Aid, Program Progression, etc.) • Be student-driven in understanding how PLA fits into the students' career goals
Sense of Belonging	• Provide tools that empower the student to make good decisions • Foster student/advisor and Student Success Coach relationship • Share individual and collective passion and caring for the student

In this study, the AR team aligned implementation of PLA with the mission and values of each community college. AR team members kept at the forefront through communication how implementing PLA aligned to the mission of the organization. Aligning PLA with the mission of the college assisted the AR team in defining strategic and achievable goals.

Simplified Policies and Processes

Simplifying PLA policies and processes became an intentional focus of the AR team. After an initial review and analysis, the AR team quickly realized that many campus processes and procedures were not aligned to seamlessly implement PLA. Cathy shared:

> *We periodically bumped into our own policy. Our policies were causing too many difficulties in why people have to retake the classes when they already have the certification. We saw the value in taking a good hard look at our policies, and working to improve it.*

Gary supported this need when he reflected on barriers to PLA implementation: "*The initial barrier is there are so many elements to prior learning assessment, and there are so many owners that it has been complex to unravel, and creating something integrated is difficult*." The AR team acknowledged the complexities that needed to be streamlined to create clearer processes. Additionally, Gary commented, "*Our college is really working hard on trying to integrate systems to have a smooth entry for students interested in PLA.*"

Moreover, the AR team found that though PLA practices may have been in place, the understanding and execution of them varied across the campus. Ed described barriers faced by a lack of cohesive processes:

> *Many academic divisions had their own PLA way of doing things. We had course catalogs to try to explain examples of PLA, and it was to analyze student's records, testing out, registrar requirements, handling with the students, and then approving and disapproving. So, there was an overall process, but how it was done was really apples to oranges. You really couldn't know what people were doing. The overall process was there, but some of the ways that one department found was justifiable may be seen different in another department.*

The AR team was intentional about making the PLA process easy to understand and use. They determined that systematic structure and clearer processes would make it easier for faculty and staff to understand and use practices to award credit. When discussing PLA processes, Lisa commented:

> *We haven't made student support totally integral yet across the college; it's still a little haphazard about the help. Just like marketing, you can't promote something until you have everything in place. You can't just open the gates for everyone to come to you until support is in place. We've always had elements for opportunity for PLA across our campus, but when I look across the college, we haven't had the umbrella of support that would draw students in, and that's what's got to happen next. We need to build the building before we put people in it.*

Cathy discussed how her campus worked to simplify processes:

> *We clarified and put more structure in place to really focus more procedures around portfolios, because they are not standardized. We focused more structure around the areas where our faculty have to design a test or develop a portfolio, because it's more labor intensive and it needs more checks and balances. We cleaned up our policies and are working to get industry certifications cross-walked to the appropriate courses so that they can be effective. We now have the ability to effectively document learning by creating an internal form, specifically as it relates to work learning that has been accomplished through this team and some of the faculty who are engaged in PLA. We have identified a better way to document the learning of nontraditional students who believe that they have some things that they learned that match up with course*

competencies. We have made big improvement and are working on more to make sure that the students and faculty know about PLA on the front end.

The AR team collaborated cross-functionally to make PLA processes and procedures as simple and integrated as possible. The AR team found it important to simplify the very complex processes of PLA in order to improve the likelihood of successful PLA implementation.

Research Question #2: What Is Learned at the Individual, Group, and System Levels that Advances Theory and Practice about the Diffusion of Prior PLA Practices in Community Colleges?

This section provides findings for the second research question, which asked, "What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of PLA practices in community colleges?" Table 30 illustrates the themes developed after coded data were compiled and analyzed from AR team meetings and individual interviews.

Table 30

Individual, Group, and Systems Learning that Advances Theory and Practice about the Diffusion of PLA Practices

Research Question	Findings from Data	
2. What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of prior PLA practices in community colleges?	*Individual*: Community college leaders understand how their leadership empowers others to lead change.	Influence Positionality
	Group: Community college leaders are intentional about benchmarking progress in order to recognize gaps and opportunities.	Continuous improvement
	System: Community college leaders recognize the importance of outreach and marketing for successful implementation.	Access Engagement

Table 31 highlights some of these assertions as related to the second research question. A narrative supporting these assertions is provided.

Table 31

Research Question #2 Critical Incident Assertions

Interviewee	Title	Assertion
Cathy	Promote it in the context of the college's mission, within a sound and well-reasoned argument, and people usually come on board	It's easier to persuade others to change when they see the connection to the mission, vision and values of the organization.
Ed	I never had a problem with getting people get involved	Efficient and effective communication helps to persuade people to get involved.
Lisa	Leadership matters	It is important that the leader vocally supports the change.
Trina	Clearly articulating the purpose is critical	Leadership should be able to influence to get real buy-in from stakeholders.
Lisa	And then there's us	Having focused time to be intentional about the work is important to making progress.
Cathy	See what the other colleges were doing, and hear their stories	Benchmarking to other peer institutions can push an organization to see gaps and understand where progress can be made.
Lisa	We need to build the building before we put people in it	Processes and procedures must be in place before marketing and outreach can be successful.

Individual Learning: Empowering Leadership

AR team members clearly understood their role as leaders. Individually they were aware of the impact of their influence. Additionally, the AR team used their own leadership positionality to move the work forward. Specifically, having the chief academic officers (CAO) for each of the three campuses participate in this study was a key factor in keeping the work progressing throughout this study. Cathy expressed her influence on getting tasks accomplished when she stated:

When I value something and ask questions about it in explaining why we need to do it, it raises other peoples' interest because of my position at the college. I am very consistent about the kinds of things we need to be doing as a college, as far as the direction. When I am paying attention to things and promoting them, especially within the context of the college's mission, within a sound argument, and it is well reasoned, people usually come on board. I will say the one hard thing about this is that to make it move, because it's so multi-faceted, it's hard to push it at any level below mine. The work tends to stall out when I don't have time to make sure that people are moving forward on it.

Similarly, Ed expressed the influence individual leadership had on getting other stakeholders involved:

The influence was there to get others to support PLA, especially when the data collection was taking place, so emailing results, getting responses and general communication, that came from a top-down leadership structure. I never had a problem with getting people to get involved.

Lisa also emphasized the importance of leadership in the diffusing of PLA:

Leaders have got to let their passion show for the underlying value of what we were doing. We have got to let people know how we think. I continue to do that. It is important they hear it from me. That really is the bottom line.

Moreover, though the CAEL consultants did not participate for the duration of this study, when interviewed about her time involved in this study, Trina highlighted the influence and leadership of the AR team, particularly the influence of the CAOs:

The fact that the CAOs themselves led their teams with guidance from you (researcher) and CAEL. This is unheard of this early on in the process. When they were able to

clearly articulate the explanation of PLA and why it should be happening, that was a sign that there was real buy-in and real understanding with campus teams. The leadership and influence that the AR team had throughout this process was a highlight to this work.

The members of the AR team realized their role as influential leaders. They acknowledged the power they had individually to lead, as well as the importance of empowering others to diffuse PLA.

Group Learning: Benchmarking

In this study, the three institutions worked collaboratively developing a sense of camaraderie amongst the group. This amity allowed the AR team to compare and assess their processes and standards against each other. During the AR team meeting after the Professional Learning Day, Matt, the director of South Consortium, shared his thoughts on what he observed: "*What is so advantageous for this group is the cross-sharing of information and the benchmarking that has occurred, and will continue to occur between each of the colleges, that is what is exciting about this work*." Similarly, Ed stated: "*We shared best practices and resources and had positive energy to keep the work moving. We always had someone to benchmark and compare ourselves to. That was the catalyst."* Lisa shared this sentiment when personally reflecting on participating in the professional learning day:

I benchmark, but I don't really judge myself against other colleges; I believe you set your own goals, and you have to achieve those. While I would have liked to think we were further along, just being with the integrated group helped me understand that this involved the whole campus; everybody else has got to be behind it. That day, I felt like they could and would be. I say this about a lot of things at our college, that the only thing between us and greatness is ourselves. That's how I came away from that day. I

think the turning point was being with the other two groups and understanding what they were doing and how we were going to specifically focus the work at our college.

Similarly, Cathy expressed:

> *The turning point for me was when we gave a joint presentation and I was able to see what the other colleges were doing and hear their stories, and where they were in the process. It kind of opened my eyes to what some of the possibilities were and the low-hanging fruit that we were not taking advantage of. That is when I became much more focused on seeing this through to the end, regardless of where we were with the grant. I saw the ability for the college to do this so much better than we were and more effectively to serve our students. It was actually in reach; we just needed to roll up our sleeves and do the work.*

Benchmarking was also evident in the AR teams' desire to distribute the Assessing Stages of PLA Implementation survey to peer institutions who did not participate in this study. This desire was likely driven by the need to have observable results, to see that the interventions and strategies that the AR team engaged with were promoting improved outcomes for implementing PLA. The results of the assessment showed that the AR team campuses were much further along in implementing PLA when compared to other institutions that did not participate in this study. The positive results of the benchmark survey helped AR team members diffuse information to key stakeholders. Cathy stated, "*I will have to share this information, especially to my president, to show that we are doing great things."* Similarly, Lisa commented on the positive results for the participating campuses from this study to be much further along than non-participating campus: "*This makes me happy, the fact that we have been engaged, and*

we see PLA differently, we can do it, and I have to share these results with everyone." Gary provided a summative statement regarding the information provided by the assessment:

> *It is clear that our project team campuses are in a better state of affairs as it relates to PLA than those that did not participate; in both effectiveness, things that are in the works, and things that are emerging. This shows the work that has been done has certainly paid off in the ability of the three colleges to better and more effectively use these tools or these sets of tools. So that should be a payoff differentially in the way that we serve our students.*

In this study, the AR team performed at high levels to achieve their goals and were motivated by the progress of their fellow colleagues participating in this study, as well as the observable results of the progress being made in comparison to other non-participating colleges.

System Learning: Marketing and Outreach

The AR team knew the importance of marketing and outreach, but were unable to fully execute these efforts until the foundation of policies and practices was streamlined. The AR team worked to develop an intense marketing plan, but did not reach the point of readiness to implement the plan during the duration of this study. They learned very quickly that having foundational elements of clear policies and practices in place was important, before any marketing or outreach could take place to promote PLA. Lisa reflected**:**

> *You can't market something until you have everything in place. You can't just open the gates for everyone to come to you until you have that in place. We need to build the building before we put people in it. I have no doubt that marketing is ready to be a part of this, so now we are getting things in place.*

The campuses in this study learned that marketing would not be easy without all the PLA processes and systems working smoothly. Cathy exclaimed, "*We have revised our policies and*

procedures, but PLA is still not an integral part of our outreach and marketing at this point." However, though the campuses were not ready to market PLA during the duration of this study, the leaders still recognized the importance of providing access to potential PLA students for systematic implementation. Ed asserted, "*We need to market or spread the word instead of just sitting on it. We need to actually get the word out, whether it's the website, communication, or advisors, and the earlier in the game the better*." Lisa commented, "*PLA might really encourage somebody to come back to college or to start college. Or this validation of what you have already done may be just the push this person needs. We need marketing*."

Moreover, the AR team understood the broader affect that marketing can have on increased successful outcomes. Cathy stated:

> *We know the value of PLA. What keeps the momentum going is knowing how close we are to something that can be effective, and frankly, enrollment is not going up, it's kind of flat. So, anything that has the potential to be used to market an advantage, and maybe reach a different set of students than what we would normally reach, is something that we want to pay attention to. It's the right thing to do for the student, and we could use more students.*

The community colleges in this study identified the importance of marketing PLA to students and the broader community; however, they had to realize that for greater impact, foundational processes and policies had to be introduced within the system first.

Research Question #3: How Do an External Diffusion Group and Lead Researcher Support Fidelity of PLA Implementation in an Action Research Study?

This last section provides findings for the third research question, which asked, "How do an external diffusion group and lead researcher support fidelity of PLA implementation in an

action research study?" Data were derived from AR team meetings and researcher reflections. Findings are shown in Table 32.

Table 32

Fidelity of PLA Implementation by an External Diffusion Group and Lead Researcher in an Action Research Study

3. How do an external diffusion group and lead researcher support fidelity of PLA implementation in an action research study?	An external diffusion group and lead researcher support fidelity of PLA implementation through distributed leadership.	Collective Voice Shared learning Collaboration

Distributed Leadership

From the initial onset of this study, the lead researcher and two consultants from the external diffusion group (CAEL), collaborated to develop strategies and approaches to help the participating colleges implement a robust PLA system. During the contracting phase, I had previously shared with the lead CAEL consultant, Trina, the leadership role I needed to take up with the AR team in order to successfully lead change through the action research process. Trina was very supportive of my role and trusted me to lead the team. She and I had worked together before in implementing PLA at a previous worksite, where I directly reported to her and was responsible for helping to lead PLA implementation with other colleges and universities. Hence, she was aware of my leadership skills and capabilities and trusted me to lead the meetings and move the team through the action research process.

Collective voice. Since CAEL had already begun to work with the three campuses before I engaged with them for this study, it was important that the CAEL consultants and I have a unified approach for moving forward. We agreed that this would be achieved through

collective voice. Therefore, before each team meeting there was a pre-meeting between myself and Trina on the project. This pre-meeting was for us to discuss the strategy and specific goals for the meeting. The CAEL consultants agreed to yield to my guidance on the agenda setting, since the AR team was engaging in this study.

Shared learning. Through this collaborative process, we all learned from each other. CAEL learned about action research and its approach to lead change in organizations which, in this study, was being guided by Rogers' (2003) diffusion of innovations theory. Simultaneously, I was learning the key strategies of systematic PLA implementation. Lisa expressed this sentiment in the second AR team meeting:

> *We really appreciate the opportunity to work with CAEL as well as you as an outside researcher. The collaborative approach gives us an opportunity for us as a team to really dig into what the process looks like on our campuses. Each perspective, from CAEL and from the research, really give us robust resources for communications and processes from different perspectives.*

While CAEL was focused on specific deliverables, as the lead researcher I was intentional about allowing the problems and solutions to be more organic from the individual campus needs of the AR team. Initial expectations from the CAEL perspective were formed around the notion that the three campuses would develop systematic policies and practices across all three campuses participating in this study. However, after initial problem-finding conversations, with my guidance and through collaborative discussions with CAEL it quickly became apparent that the goal would be individual implementation by campus, though the AR team would work collectively on the strategy. During an initial AR team meeting I stated:

My role is to guide the team approach as to how we may get to some other underlying issues that may be apparent at each of your campuses. The goal will be to inquire and reflect throughout this process so that we can ensure we are accomplishing our goals as we develop interventions to meet your individual campus needs.

Once CAEL was no longer involved, I needed to reset the AR team and ensure that it kept at the forefront the learning that should be occurring as a part of the action research process:

Moving forward, we really need to focus on how each institution is working toward implementation. There is a gap in the research around PLA implementation, so what we learn here will be able to inform practice. As a member of this AR team, I am not here to only analyze what you are doing but am here to help guide the work; so, as a team, collectively we can learn how to best implement PLA and overcome barriers.

Together we were able to integrate information to guide the team.

Collaboration. From the onset of this project, CAEL and I collaborated to move the work of the AR team forward. At the initial meeting with the AR team, Trina, the lead CAEL consultant stated:

The opportunities for this team to work with Ashley will be most beneficial to accelerating PLA implementation. Ashley and I have discussed our shared roles, and her role will be critical to coordinating and communicating with this team on an ongoing basis, to draw up a timeline and potential actions to keep momentum going on the campuses.

In preparing for our approach for the Professional Development Day, Trina and I collaborated with the AR team on the right approach to gain buy-in from the larger campus teams and representatives that would be attending. We collaborated to ensure that we were

intentional about strategy to maximize the impact of this day. Kim shared the value in CAEL and me working together through this process:

> *In thinking about the planning of the webinar for the faculty role really bringing out the double edged sword to them, and Ashley, as you have helped us to think through how we move through the change process through action research, and considering the strategies that we have learned from CAEL, this will be really good in helping faculty and staff buy in to PLA as well.*

Moreover, during the AR team meeting after the Professional Learning Day, Ed reflected:

> *Having the CAEL perspective as well as the leadership of this team by Ashley was a great takeaway. Having our colleagues' and college's specific current status and how everyone shared what they were doing and planning to do was so helpful. Having access to such rich expertise from CAEL and Ashley, reaffirms that what we are doing is consistent with best practices at other colleges that are successful in PLA.*

Midway through this study, CAEL no longer participated in this process. Since the team would no longer be collaborating with CAEL, it was important to remind the team of the action research methodology, Rogers' (2003) diffusion of innovations theory, and the interventions still needed for an individualized campus approach to PLA implementation. During this meeting I stated:

> *We have to think about how to move this work forward as you begin to ramp the work up on your campuses. We can begin to think about it around these five factors of diffusion and strategies; that will be helpful as we think about the interventions and how those things integrate together in actually shifting mindsets and behaviors around the change.*

Gary shared this notion during this first AR team meeting once CAEL was no longer involved:

I think the intentionality behind the design, that is probably one of the key points that Ashley has helped us with. Being intentional about the design and choosing the different strategies that fit your institution is key. It is certainly not one size fits all, and each institution has to figure out how it fits into its educational philosophy. Ashley's guidance has helped us work through that.

In this same meeting, when the team openly discussed how to move forward, Lisa stated:

CAEL helped us understand the tools and resources, but we need the time to continue to move it forward. That is where our continued engagement with Ashley in this research project will be beneficial in making sure we keep the work going towards implementation.

It was very important to the AR team that the work accomplished thus far would not get lost since CAEL was no longer involved. Their commitment to the work was even stronger once I reset the team and we collectively committed to continue to move the work forward. Cathy exclaimed:

I am glad you are going to continue to work with us over the next few months around the steps we are taking to implement our PLA systems and reflect on our goals of increasing enrollment. Part of it is going to be talking about how we get there, how we do the implementation, the barriers, the opportunities; and your insights will be beneficial as we work through this as a team.

The AR team appreciated the access they had to the expertise from CAEL as well as the knowledge and leadership I as the lead researcher brought to the process. I shared with the team:

I am here to help each of you navigate the barriers you are experiencing on your campus with the adoption of PLA. This may be even helping you think through the roles and

responsibilities of key positions critical to PLA implementation. I am here to offer my expertise in this area to the team to help you all be very successful in this work. I am here to help you as we work together to achieve the goals of this project.

There was increased collaboration and commitment as a result of this action research study. This chapter produced findings from the participant data in an attempt to answer the study's three research questions and attend to the study's main constructs. A summary of the study is included in the next chapter.

CHAPTER 6

CONCLUSIONS

The purpose of this action research (AR) study was to explore how community college leaders implement strategies to effectively diffuse prior learning assessment (PLA) practices to promote adult college completion. The guiding research questions for this study were:

1. How do community college leaders effectively diffuse prior learning assessment (PLA) strategies to promote adult college completion?
2. What is learned at the individual, group, and system levels that advances theory and practice about the diffusion of PLA practices in community colleges?
3. How do an external diffusion group and lead researcher support fidelity of PLA implementation in an action research study?

This final chapter presents the findings and their connection to the literature and an examination of the conclusions resulting from the study's research questions. This chapter also provides implications for practice, theory, and future research, and closes with final reflections.

Study Summary

This action research case study adopted a qualitative approach to collecting the primary data and engaged an AR team for approximately a year. The researcher and AR team also collaborated with the Council for Adult and Experiential Learning (CAEL) at the beginning of the study. A review of the literature revealed that PLA is a proven strategy to help attract adult learners to enroll, persist and complete college, but community colleges do not always have

effective policies and processes in place to successfully support these goals for adult learners. Qualitative research was appropriate for this study to explore how community college leaders diffuse effective PLA practices on their campuses. Data were gathered through critical incident interviews with six community college leaders. In addition to these interviews, data were extracted from team meeting minutes, observations, and researcher journal entries. Each critical incident interview and all meeting minutes were personally transcribed by the researcher and were made available to the AR team for review and changes. Through the study, a constant comparative method was used to analyze the meeting transcripts and the critical incidents interviews. This method of analysis yielded themes and subthemes related to the research questions. In the following sections, a summary of the findings around each of the three research questions is provided.

Study Conclusions

The aim of the research was to explore how community college leaders implement strategies to effectively diffuse PLA practices to promote adult college completion. Using the data from this research, the AR team created interventions to improve processes and disseminate awareness of the purpose and benefits of implementing PLA. The research was situated in a higher education context, and the findings informed the diffusion of innovations theory and the practice of action research. The case study offered a unique look at PLA implementation in three different community colleges. Rogers' (2003) attributes of an innovation supported the diffusion of PLA on each campus that participated in this study. These attributes are relative advantage, compatibility, complexity, trialability and observability. Relative advantage was apparent by the three colleges acknowledging that PLA is a best practice that provides benefits to adult learners. Ultimately, by agreeing to participate in this study leaders of the three community colleges

realized that an investment in PLA would eventually lead to improved outcomes and increased adult college completion rates. Compatibility was evident from the community college leaders' intentionality and focus on aligning the purpose of PLA with the mission and vision of each college. This alignment helped to foster a sense of like-mindedness and ambition across a common purpose with various stakeholders. The community college leaders were purposeful in improving the systems and processes to encourage implementation of a robust PLA system. This notion supports Rogers' (2003) concept of complexity. At the beginning of this study, the community colleges realized that the existing PLA processes were complicated and not easy to use. Ongoing actions throughout this study included the community college leaders taking the time to work with other stakeholders to unravel and understand the complexities of implementing PLA in order to lead to better integration across various systems. Trialability was apparent from the beginning of this study by the colleges agreeing to implement PLA with institutional autonomy and prerogative. Each college decided that while AR teams would decide the strategies collaboratively, each AR team member would take the practices back to the individual campuses and see what worked well. Lastly, observability supported the diffusion of PLA by allowing the colleges to learn from what each other was doing. Sharing information and knowledge, and observing the challenges and barriers at each college, helped the other colleges to learn lessons to improve PLA implementation. Additionally, by observing the progress of non-participating peer institutions, in comparison to their own progress, the community colleges in this study were able to evaluate their own relative advantage of PLA implementation. The next sections discuss the themes and conclusions that emerged from the findings.

Conclusion #1: Building Social Networks, Communicating Knowledge, Aligning Mission, and Improving Infrastructure Encourages the Adoption of PLA.

This conclusion relates to the first research question, which sought to understand how community college leaders effectively diffuse PLA strategies to promote adult college completion. Findings showed that it was important in this study for the AR team to build strong social networks, communicate applicable knowledge, align the purpose of PLA with existing college mission, and improve the infrastructure of policies and practices to encourage the adoption of PLA.

Social Networks. It was essential for the AR team to figure out strategies to get stakeholders involved who would be instrumental in PLA implementation. Therefore, the AR team instituted a PLA advisory team as an intervention. The AR team was intentional about ensuring that cross-functional representatives served on each of the PLA campus advisory teams. This PLA advisory team was the first thread of the social system the AR team sought to gain support of adopting the innovation. Rogers (2003) defines a social system as "a set of interrelated units engaged in joint problem solving to accomplish a common goal" (p. 23). The social system formed between the AR team and the campus advisory teams was critical to promote the diffusion of PLA on each campus in this study, because it allowed for different perspectives and input on various challenges and opportunities. Sahin (2006) found that successful diffusion of innovation takes place within the social system and is influenced by the social structure of the system. This helped to leverage the social networks across campus functions to diffuse PLA strategies so that department chairs and various offices, including admissions, financial aid, and student support, were involved in the process. The diffusion of

innovations theory posits that the structure of a social system can either hinder or support the diffusion within a system. In this study the social system supported the diffusion of PLA.

Rogers (2003) states "the social system constitutes a boundary in which an innovation diffuses" (p. 24). The collaboration that occurred between the social systems that were created in this study resulted in increased productivity towards PLA implementation because various stakeholders worked to achieve a common goal. Moreover, Sapp and Korshing (2004) found that diffusion increases the degree of influence and collaboration to adopt an innovation, resulting from the activation of social networks to support adoption. In this study, the AR team used their influence as chief academic officers and program managers representing South Consortium to encourage leadership of other campus leaders to work towards PLA implementation.

Communicating knowledge. The AR team was intentional about communicating knowledge with each other, as well as with other community college stakeholders. The AR team thoroughly planned opportunities to share information on PLA, including hosting webinars and participating on various advisory committees. Lakin et al. (2015) state that effective implementation of PLA is supported through strategic information sharing. Rogers (2003) asserts that during knowledge sharing, decision-making stakeholders are exposed to the innovation's existence and gain some understanding of how it functions. Moreover, Yocco (2015a) claims that during the knowledge phase of diffusing an innovation, potential adopters are made aware of the innovation since they have not had an opportunity to seek out information.

The AR team was deliberate about the invitees to the Professional Learning Day to make certain that various campus functions were represented and had an opportunity to offer their perspectives. Green, Gottlieb, and Parcel (1991) found that the rate of adoption is accelerated

through more intensive and more appropriate communication and outreach to share information about the innovation. When hosting the Professional Development Day and webinar series, various campus stakeholders were made aware of why the colleges were being intentional about implementing a robust PLA system, and how each of them would be needed to see full realization. The sharing of knowledge about PLA by the AR team helped to develop a sense of need for PLA. "Knowledge of the existence of an innovation can create motivation for its adoption" (Rogers, 2003, p. 166). Moreover, the AR team was intentional about targeting specific audiences for the various webinars to make sure that the roles and responsibilities were unique to each group to better understand expectations around institutionalizing PLA. Banyte and Salickaite (2008) found "the probability of successful adoption of innovation will be greater if communication with stakeholders during the process of diffusion is performed by an expedient and clearly understandable communication message, oriented towards the behavior and preferences of the target segment." Moreover, good alignment of the appropriate individual characteristics to disseminate knowledge is important to diffusion (Shea et al., 2005). These interventions provided a chance for critical stakeholders to ask questions and get clarity around their roles and expectations in supporting PLA implementation. Research by Yocco (2015a) showed that to maximize adoption, organizations must provide the right information to the right stakeholders. It was important in this study that there was ongoing and constant communication and information sharing between the AR team and other stakeholders who were expected to implement PLA.

Aligning mission. In order to focus on people's beliefs about the importance of PLA, the AR team leveraged opportunities to shift attitudes and behaviors by aligning the purpose of the innovation to the mission of each college. Lakin et al. (2015) claim that institutional culture

frames a college's mission and affects strategies and resources to implement PLA. The AR team offered opportunities for faculty and staff to ask questions and provide their perspective on how they felt PLA could best be institutionalized. Understanding how PLA relates to a college's mission is important when considering readiness and the capacity to implement PLA (Lakin et al., 2015). This sentiment aligns with the attribute of compatibility described by Rogers' (2003) diffusion of innovations theory. Rogers (2003) defines compatibility as the degree to which an innovation is perceived as consistent with values, beliefs and stakeholder needs for innovations. Linton (1936) found that diffusion includes a presentation of the new cultural elements to society, acceptance by the society, and integration of the accepted elements into the existing culture. Similarly, the success of the innovation is dependent on ensuring that the innovation aligns with potential user beliefs, attitudes, values, and behaviors (Yocco, 2015b). In this study, the AR team aligned PLA implementation with the mission and values of the participating colleges in order to shift attitudes and behaviors of potential users.

Improving infrastructure. The AR team was intentional about focusing on building the appropriate infrastructure to support PLA implementation, including improved practices and policies. Research presented by Shea et al. (2005) suggests that infrastructure is significantly linked to adoption and engagement with an innovation. Moreover, the researchers found that the existence of integrated policies and processes can be reasonably associated with overcoming complexity concerns, and increases the likelihood of use of the innovation (Shea et al., 2005). This supports Rogers' (2003) notion of complexity, which is defined as how simple or complicated the innovation is to use. In this study, the AR team quickly realized that the existing PLA processes and practices were complex and not easy to use. It was important for them to understand how the practices and policies could be simplified for better clarity. Lakin et al.

(2015) state that the aim should be to create policy and procedures that help students, staff, and faculty more easily navigate PLA. Throughout this study the AR team worked to improve PLA policies and practices to promote adoption by engaging in process mapping activities and revising policies by collaborating with the social network. Lakin et al. (2015) assert that focused attention to a collaborative process is a proven strategy for aligning PLA policies and practices. Research by Yocco (2015b) found that infrastructure for the innovation must include planned improvements. Research on the diffusion of innovations shows that complexity was one of the factors most highly related to the rate of adoption (Rogers, 2003). In this study, the AR team focused attention on improving the PLA infrastructure to encourage adoption across each campus. Banyte and Salickaite (2008) found that if the use of an innovation is defined clearly and uncomplicatedly, then there is an increased possibility of successful diffusion and adoption. Managing complexity is one of the greatest challenges to the diffusion of innovation (Shea et al., 2005). The simplified processes and revised policies helped to gain buy-in across the campuses in this study to promote successful adoption of PLA.

Conclusion #2: Creating a Holding Space Was a Key Aspect of the Sustainability and Success of this Project

A key dimension of this project was the holding space that I created for continuous reflection and shared accountability. Shared accountability was encouraged by **s**hared leadership of learning throughout this process. Pearce and Conger (2003) define shared leadership as a dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group and organizational goals. As the researcher I created a space for shared leadership with the AR team as well as CAEL and worked collaboratively to achieve the goals of the study. In understanding fidelity of implementation,

Murray (2009) suggests that researchers and implementers must work together to translate research to practice and have professional dialogue, and researchers must provide greater clarity, relevance, and ease of use to their studies. I led the AR team by working in partnership with CAEL to set the agenda and direction of the interventions. I posit that the diffusion of innovations theory helped to reach this goal by providing a framework for me to lead the conversation, ask probing questions, and frame interventions in order to keep the momentum of the AR team moving forward. Research by Berman and McLaughlin (1977) claim that clarity of project goals are important to implementation.

Since I as the researcher, CAEL, and the AR team all had a vested interest in the success of this project, it was easy to agree on the research direction and interventions. Research by Petruzzelli (2010) found that "introducing the innovation to established like-minded groups can establish mutually supportive adopters that help create the perceptions of a highly desirable change" (p. 42). I helped to keep the team grounded in the theory guiding this research study, in order for us to work toward diffusing PLA on each campus with authenticity.

I offered a supportive environment for the AR team to try out various strategies in support of successful PLA implementation. Research by Berman and McLaughlin (1977) found that implementation strategies strongly affect outcome and continuation of innovations. Creating a safe space for the AR team to collaborate and take strategies back to each campus encouraged engagement throughout this study. Moreover, Berman and McLaughlin (1977) found that when practical support is given in the form of consultation and project meetings are done successfully, it is more likely that an innovation will be adapted in various contexts (Berman & McLaughlin, 1977). In this study, I served in a consultative support role to the AR team in addition to my role as researcher. I was intentional in setting the agenda for each AR team meeting to ensure that the

work was progressing, while also increasing knowledge and learning about PLA implementation. Consistent with research by Burchell and Dyson (2005) the AR team meetings provided space for collective and individual reflection. Berman and McLaughlin (1977) suggest that such an environment creates the climate and moral support necessary to motivate teams to expend the effort to achieve project goals. The meetings were sometimes difficult to schedule because of the diverse demands on the AR team but each member was committed to this project and the structure I put in place for consistent interaction.

I was able to help the AR team provide continuous and active attention to implementing PLA on each campus, by creating a formal process for the AR team to report on progress and meet consistently to work toward goals. Similar to research by Burchell and Dyson (2005), this project provided a framework within which it was possible for the AR team, "who were already reflective practitioners to focus their reflection in a more systematic way and to consider how to adjust their practice in response to what they were discovering through their involvement in the project" (p. 297). Hence, creating a reflective, supportive and consistent space supported successful PLA implementation in this study.

Implications for Practice and Theory

Implications for practice suggest that strong leadership that is able to influence key stakeholders is needed to successfully diffuse PLA practices. In this study the AR team developed a marketing plan and began to implement an assessment plan. Throughout the duration of this study it was difficult for the AR team to focus on the marketing plan because of the need to ensure that the foundational structures were in place first. These foundational structures included a strong social network, aligned mission and improved infrastructure. Therefore, to implement PLA, these foundational structures needed to be in place before

institutions could effectively execute a marketing plan and track an assessment plan. The assessment plan, while developed as an intervention, was not tracked during the duration of this study because measuring the success of PLA implementation occurs over time. Demands from evaluating the success of PLA implementation will be a challenge for colleges and universities to develop a consistent program that is truly supportive of adult learners' goal to complete college. Tracking success will be very important in analyzing whether or not PLA is fully institutionalized; however colleges will need to be patient in tracking success from enrollment through matriculation to graduation to accurately evaluate progress.

Community colleges should focus on factors influencing PLA adoption, including professional development, infrastructure, and outreach. More outlets to disseminate knowledge around aligning the innovation to the attributes, particularly compatibility and complexity, will be crucial in ensuring that foundational structures are in place to support long-term sustainability of the innovation. Moreover, Levine (1980) suggests sustainable success of an innovation occurs by continuing to create a climate for change; being flexible, appreciating timing, engaging in information dissemination and evaluation, establishing awards, and planning for the post-adoption period. Continuously focusing on these strategies will help community colleges sustain PLA practices. Lastly, fidelity of implementation can be achieved through shared leadership as long as theory guides the approach and a safe holding space is created.

Recommendations for Future Research

This study raised additional questions and issues for future research, which are discussed in this section. While this study mostly focused on the faculty and staff at the community colleges, more research is needed in understating the student's perspective on adopting and taking advantage of PLA options. One direction of future research would be to have specific

emphasis on the impact the diffusion of innovation has on students being able to effectively use PLA and get awarded credit toward degree completion. While the campuses in this study focused on improvements from an organizational perspective, the student's perspective on going through the process of applying for and being awarded PLA credits was not captured in this study. Future research can also focus on a broader range of various types of institutions, including baccalaureate colleges and universities, to see where similarities and learning can occur across the higher education field. While PLA is only one aspect of better serving adult learners in college, a deeper understanding of how this innovation may be successfully diffused to a wider audience within the higher education community will enable institutions to meet a larger proportion of demand that will come in the future.

Final Reflection

From the onset of this study, I had apprehensions about working with my AR team as a novice outside researcher. I had never met or interacted with any of the members of my AR team, and half of the team were established in their careers and had accumulated doctoral degrees, including the lead CAEL consultant. For this reason, I was very critical of myself and felt I had so much to prove, not only to the AR team, but also to myself and my doctoral committee. I needed to know and be confident that I could truly lead the team through the action research process. I planned and thought through my approach, including how I would lead and what I would say and ask for at every interaction. I think this was helpful for me on many occasions as a novice action researcher, but sometimes I may have missed an opportunity for the conversation and the learning to be organic. It was important for me to ground the actions of the AR team in my theoretical framework so that I could defend my credibility as a researcher as well as the process that I was engaging in with them over time to implement PLA.

Through this process, I learned to guide and facilitate knowledge through my own voice. I learned to understand the value of questioning and probing. For example, during AR team meetings I interjected reflective questions based on the direction of the discussion. I might say, "tell me more about that" or "can you explain what you mean a bit more." Additionally, during critical incident interviews, I learned to improvise new questions that were not planned, based on the information shared by the AR team member, to gather more insight to help define and understand the story.

What was comforting throughout this study was the openness of my AR team and the CAEL consultants to work with me and their willingness to allow me to guide them on the path forward. My own self-awareness of how I lead and take up my influence has been a life-learning experience that will allow me to continue to take up my voice of leadership in the field. I learned to speak up and interject my perspective to improve the goals and direction of the team. Moreover, throughout the study I increasingly shared my expertise about what may or may not work in implementing PLA based on my previous experience. Additionally, I used my knowledge to become a thought partner with the team to think through best practices and strategies to accomplish goals. I became more confident in my ability to serve as a coach and motivator to the AR team to keep the momentum moving forward to achieve full PLA implementation. Many times, due to the conflicts of multiple priorities held by members of the AR team, the progress on PLA may have stalled, in terms of accomplishing action items in between meetings. When we would reconvene, and as AR team members might share their frustration or slack in commitment, I would help them work through strategies they could use to get back on track in order to progress. Since each campus progressed toward implementation at different rates, they also sometimes felt like they weren't keeping up with the other colleges. I

had to remind them that though the interventions were developed collaboratively, the ability of each campus's stakeholders to adopt will occur at various stages. To ease this feeling, I allowed the campuses to work at their own pace as long as consistent progress was being made. Ultimately, I kept the AR team members connected to why they engaged in the work initially. Additionally, I frequently reminded them to celebrate small wins, and to share successes with stakeholders. Sometimes, when they would get push back from faculty, I had to bring them back to the research to understand why the person might be resisting, and to understand strategies and conversation points to help bring them onboard.

Summary

This action research case study explored how community college leaders diffused PLA strategies to promote adult college completion. Results of the study showed successful PLA implementation was supported by the attributes of diffusion of innovation, particularly focusing on aligning complexity and compatibility of the innovation within the college. Data analysis of the six AR team members' critical incident interviews revealed how the diffusion of PLA was supported by a strong social network led by influence the team members had on other cross-functional stakeholders.

The diffusion of innovations theory benefited this study because it helped to identify the needs of all involved stakeholders with robust strategies for implementing change, including instituting a PLA advisory campus team, employing professional development, solidifying process mapping, and creating marketing and assessment plans. Moreover, using the diffusion of innovations theory allowed community college leaders to make progress toward positive outcomes for successful implementation by fostering collaboration and engagement with stakeholders. Understanding how this innovation may be successfully diffused to the broader

campus community and students will enable these and other institutions to better impact and meet adult college completion goals.

The AR team realized that it was important to have foundational structures in place before marketing and outreach could be fully realized. Moreover, since the community colleges were engaged in the beginning stages of implementation, they were not yet able to fully utilize the assessment plan, though it was felt that having the plan created during this this study was very beneficial in guiding outcomes for the future. Each of the community colleges could already begin to see the benefits of their progress on PLA implementation by benchmarking themselves against the institutions not intentionally focused on PLA. The results showed that the campuses in this study were much further along in having an effective PLA system exemplified by a broad and deep understanding of policies that support institutionalized practices. The community colleges will need to continue to refine processes and policies to gain greater buy-in across all facets of the college to sustain implementation of these findings.

The premise of this study was based on helping community colleges better serve adult learners through PLA, to promote college completion. There are many colleges that seek to improve college completion rates, but do not have the appropriate and truly adult-friendly systems in place to assist in encouraging adult learners to enroll and persist through graduation. After my own experience of witnessing the obstacles my husband faced to go back to college as an adult learner, I am committed and have a continued passion to help higher education institutions remove barriers to better support adult college completion. It is my belief that everyone, regardless of experience or path, should be provided the opportunity to obtain a college degree. If receiving credit for previous learning helps to promote completion, then the proper systems should be in place to support actions toward this goal. I was privileged to help

not only my husband but also a very close friend to navigate reenrolling and completing college. Seeing both of them walk across the stage to receive their college degree as adult learners was a proud moment. However, there are many other adult learners who aren't as successful. Throughout this study, I continued to keep at the forefront all the adults who wish to go back to college to complete a degree but don't know how to navigate the higher education system to enroll, or may attend an institution that does not offer PLA. To know that the work accomplished at each campus participating in this study will make it a bit easier for another adult to complete college is personally gratifying. Moreover, seeing the passion and commitment of the AR team to believe in the value of adult learners and how PLA can not only assist the student, but also achieve the larger mission of each college to support the workforce, excites me for the future of our nation.

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