PROGRAM PRIORITIZATION PRACTICES AT COMMUNITY COLLEGES

by

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ABSTRACT

As community college funding continues to diminish and finances become increasingly tight, difficult decisions regarding the allocation of scarce resources must be made. The focus on completion rates driven by political and public demand for accountability makes the wise allocation of college resources even more critical. These competing challenges can only be met by realizing gains in efficiency.

Prioritization is a process by which a framework of defined criteria and measures are used to make consistent and informed decisions to ensure that resources are allocated or reallocated strategically and efficiently. Prioritization can be used as a tool to help community college leaders decide what programs and services should be phased out, what programs and services should be infused with resources, and what new programs and services should be developed. Ultimately, the goal of prioritization is to use valid and reliable data to inform holistic resource allocation decisions to refocus on the core mission, while improving efficiencies and quality.

The purpose of this research was to evaluate the state of prioritization work at community colleges; share best practices, success factors, and pitfalls to avoid; and encourage and improve prioritization efforts. It is the hope of the researcher that this study will inform and improve prioritization practices and outcomes at community colleges. It is also hoped that this study will encourage more community college leaders

to embark on a prioritization journey as a strategy to support and advance the community college mission.

DEDICATION

This dissertation is dedicated to my family, especially my children—Ryan, Andrew, Alex, Sarah, Eric, and Tiana—and my dear sister Angelia, my father, Les, and my Aunt Angelia. My love for each of you inspires me to grow, improve, and persevere throughout my leadership journey. This dissertation is just the most recent milestone along my leadership path.

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CHAPTER 1: INTRODUCTION

Many community colleges struggle with insufficient resources to fully realize the mission. As stated by Jones and Wellman (n.d.), "America faces a growing crisis in postsecondary education, as an unprecedented fiscal meltdown plays out at a time of growing consensus about the urgent need to nearly double the level of degree attainment" (p. 1). While community colleges are not the only higher education institutions facing financial challenges, according to Walter Bumphus, president of the American Association of Community Colleges, community colleges make up the largest segment of higher education in the United States, yet they are the least funded (2012).

In order to meet the conflicting challenges of fiscal belt-tightening while improving degree attainment and other student success measures central to the community college mission, community college leaders much ensure that scarce resources are used wisely. Program prioritization can help and is essential to strategic allocation and reallocation of resources to achieve organizational efficiencies, while maximizing effectiveness. As stated by Dr. Robert C. Dickeson (2010), the reigning authority on prioritization, "The most likely source for needed resources is reallocation of existing resources" (p. 1).

WHAT IS PROGRAM PRIORITIZATION?

Program prioritization is a process by which a framework of defined criteria and measures are used to make consistent and informed decisions to ensure that resources are allocated or reallocated strategically and efficiently. Such a framework or model can be used as a tool to help community college leaders decide what programs should be phased out, what programs should be infused with resources, and what new programs should be developed. In this context, programs can include academic disciplines and programs, student services and functions, administrative services and functions, and auxiliary services and functions.

Program prioritization should not be confused with program review. The latter term is usually applied to review of academic programs only and is often more of a formative evaluation. While program prioritization and program review can include both formative and summative evaluations and action plans, program prioritization—when conducted properly—is a more holistic, high-level analysis of all the functions, programs, and services offered by a community college with the ultimate goal of using data to inform college-wide resource allocation decisions to refocus on the core mission, while improving efficiencies and quality for overall organizational improvement.

Determining which criteria and measures should be incorporated into a prioritization model is one of the first steps in the prioritization process. A 2011 survey of academic leaders conducted by *Dean & Provost* suggests that there is significant variation in factors considered when making program prioritization decisions. Several years later, a similar survey published in *Higher Ed Impact* (Mrig, A., 2013) indicates that while many

institutions are using criteria recommended in Dr. Robert C. Dickeson's (2010) seminal work *Prioritizing Academic Programs and Services: Reallocating Resource to Achieve Strategic Balance*, there is considerable disagreement about how each criterion should be weighted. Furthermore, because respondents from both surveys were representatives from higher education in general, the degree to which results are applicable to the community college sector is questionable.

With regard to financial considerations, Belfield, Crosta, and Jenkins (2013) found very limited research in the community college sector. In a presentation to the American Association of Community Colleges, Jenkins, Crosta, Drumm, and Manning (2013) affirmed that while we know the cost of academic programs from a student consumer perspective, little is known about the true costs of delivering community college programs.

Exactly which criteria and measures should be incorporated into a program prioritization model is a matter that should be decided upon after considering factors such as institutional culture, resources available for the prioritization effort, availability of data, prioritization objectives, etc. Another key consideration is who to involve in the prioritization process. Getting buy-in upfront from key stakeholders will increase the likelihood that any prioritization effort will be successful. Faculty participation is critical.

WHY IS PROGRAM PRIORITIZATION IMPORTANT?

Program prioritization has never been so vital to the future of community colleges. Community colleges are the Ellis Island of higher education; they provide open access to a college education and serve the needs of all students, particularly those with

socioeconomic challenges. Furthermore, community colleges are absolutely critical to the economic growth and prosperity of our nation as illustrated by the following quote from the White House website:

> In an increasingly competitive world economy, America's economic strength depends upon the education and skills of its workers. In the coming years, jobs requiring at least an associate degree are projected to grow twice as fast as those requiring no college experience. To meet this need, President Obama set two national goals: by 2020, America will once again have the highest proportion of college graduates in the world, and community colleges will produce an additional 5 million graduates. ("Building American skills through community colleges," n.d., p. 1)

Unfortunately, community colleges are struggling to answer this call to action as funding recedes and finances become increasingly tight. According to a report from the 21st Century Commission on the Future of Community Colleges, community colleges are "producing too few graduates to meet workforce needs… [and must do a better job of aligning]… program and degree offerings more closely with labor-market demand" (2012, p. 11).

How can community colleges do their part to support the development of a skilled American workforce, while balancing market demand for graduates with community needs and the financial barriers to meeting the core mission of providing quality programs and services? The focus on completion rates, driven by political and public demand for accountability, adds even more complexity to the issue. These contending challenges can only be met by realizing gains in efficiency. If community colleges are to survive and thrive, decisions regarding the allocation and reallocation of

scarce resources must be approached strategically and informed by relevant and reliable data. This can only be accomplished through program prioritization.

Program prioritization is particularly important when making academic programming decisions. Not only are academic programs the very heart of higher education, according to Dickeson (2010), "academic programs—and the capital and services required to mount them—constitute the overwhelming majority of current funds expenditures at any college or university" (pp. 15-16). Instructional costs alone account for from 28 to 33 percent of institutional expenditures, with academic support accounting for approximately seven to nine percent. Other costs, including academic administration, equipment, supplies, and physical plant and maintenance are all primarily driven by the core business of teaching and learning.

Yet all community college programs are not created equally. There are wide variations in an array of factors. For example, in some states, community colleges and the programs they offer are governed by a state board of elected or appointed trustees or regents. In other states, each community college elects or appoints a local board with governing authority to approve programming. Furthermore, credit and contact hours vary widely across programs. There are industry-driven certifications with as few as six required credit hours. On the other end of the spectrum, some health science associate degree programs, such as Nursing and Medical Imaging, require that students complete close to 100 credit hours. In addition, community college credentials vary. According to Horn, Li, and Weko (2009), 56 percent of awards conferred by community colleges are associate degrees; 23 percent are short-term certificates; and 21 percent are moderate

to long-term certificates (as cited in Belfield et al., 2013). Moreover, student/faculty ratios vary due to factors such as accreditation requirements, safety standards, and seat availability. Required faculty credentials vary from program to program, as do equipment and facility needs. Finally, the complement of programs offered at community colleges is heavily influenced by the local economy, employer workforce needs, and attempts to align curriculum with university transfer programs. All of these factors clearly result in variations in program costs and other important characteristics—such as demand and community need—and suggest additional criteria that should be included in a program prioritization plan (Belfield et al., 2013).

Despite the many factors that influence and shape programs, programming decisions are often made without the benefit of valid and reliable data to support those decisions. The tendency of community college leadership to make reactionary programming decisions, without the benefit of established criteria and supporting data to inform those decisions, is aptly described in the following quote from a community college associate dean:

> We are sometimes too reactive to the business community and build programs to fill a pipeline and put people into jobs that maybe they didn't want, weren't interested in, or that are a dead end. So I believe that it's very important to always put the student first as you're developing or revising programs so that you give them economic pathways and academic pathways, so that when they leave us, they still can go further if they choose to… Everybody here philosophically agrees that promoting high skill, high wage jobs is our primary goal; however, we have some programs that frankly, if I were president, I wouldn't be offering. But I think that's true of every community college in the country (as cited in Pusser & Levin, 2009, p. 49).

Walter Bumphus (2012), president of the American Association of Community Colleges, has cautioned that community colleges can no longer afford to be all things to all people. Difficult decisions regarding the allocation of scarce resources must be made. Valid and reliable program prioritization models to help community college leaders make strategic, data-informed decisions about where to allocate resources are critical if we are to answer the call to do more with less, while staying true to our mission.

PRIORITIZATION ON THE RISE, BUT COMMUNITY COLLEGES LAG BEHIND

A community college's programs and services are the core of its business. Therefore, the merit of any community college hinges on the relevance and quality of the programs and services offered. While community colleges have traditionally tried to offer a comprehensive array of academic programs and services, as well as non-academic programs and services to meet the needs of their communities, tightening financial constraints and mounting pressures to ensure student success have driven community college leaders to consider prioritizing programs and services.

Program prioritization efforts are not new to higher education. The most recognized authority on program prioritization, Dr. Robert C. Dickeson, published the first edition of his influential work on the topic, *Prioritizing Academic Programs and Services*, in 1999. However, efforts to prioritize have been on the rise for the last several years. In March 2013, Academic Impressions—a provider of webcasts, conferences, and on-campus workshops for higher education—conducted a survey of higher education institutions to

learn more about academic and administrative program prioritization efforts. Results were published in their April 2013 newsletter, *Higher Ed Impact*. Forty-nine percent of the 115 respondents indicated that their institutions had engaged in a prioritization effort; 26 percent said they were planning to do so (Mrig, A., 2013).

Regrettably, community colleges are lagging behind in prioritization efforts. When survey responses are disaggregated by institution type, only 28 percent of associate degree-granting colleges reported having undertaken a prioritization effort, with 44 percent indicating that they were planning to in the future. A preliminary study conducted by this researcher in January and February of 2015 revealed that at least 14 of the 28 community colleges in Michigan had engaged in some type of prioritization effort within the last five years. However, the preliminary study also revealed that prioritization efforts varied significantly and implementation was often extremely challenging and produced inconsistent outcomes (Kellogg, 2015).

OVERVIEW OF RESEARCH AND RESEARCH QUESTIONS

The rise of prioritization efforts is being driven by necessity. Community colleges simply cannot afford to continue to support programs and services that are ineffective and/or not central to their mission. Prioritization efforts can help community colleges refocus on the primary mission of providing quality educational opportunities and services to students that lead to completion and credentials of value.

The power of program prioritization to refocus and transform the work of community colleges to meet the needs of students seeking a better life through

education has great potential. However, program prioritization can be a monumental, politically and emotionally charged activity. Unfortunately, many community colleges that have taken on prioritization efforts have had mixed results from their efforts.

In order to encourage and support successful prioritization efforts, more research specific to community college prioritization is needed. This study will examine program prioritization efforts undertaken within the last five years by 11 community colleges in one Midwestern state. The primary research objective is to provide community college leaders with valuable information about best practices, lessons learned, and pitfalls to avoid when embarking on a prioritization journey. Research questions to be addressed by this study include:

1. What are the most common catalysts of program prioritization efforts at community colleges?
2. How successful have program prioritization efforts been at community colleges?
3. What program prioritization models are most effective?
4. What are the outcomes of program prioritization efforts at community colleges?
5. What are some of the program prioritization practices that have not been effective and should be avoided?
6. What are some of the barriers to a successful community college program prioritization effort?
7. What factors are key to the success of program prioritization efforts at community colleges? And,
8. What are some of the best practices in community college program prioritization?

PARAMETERS OF THIS STUDY

Data to inform this study were collected via interviews with community college leaders and practitioners who have direct knowledge and/or experience with program prioritization practices at community colleges. To be included in this study, participants must meet the following selection criteria:

1. Participant's organization must be a community college.
2. Participant's organization must have undertaken a systematic program prioritization, ranking, or categorization (e.g., support, maintain, watch, sunset, eliminate) process within the last five academic years.
3. The prioritization process employed must have been data-driven to some extent.
4. The prioritization effort must have included a significant unit or units of the organization, e.g., the career education division, all academic programs, or all student support programs.

SUMMARY

An increasing number of community colleges are engaged in some form of program prioritization work. As mounting demands for increased community college performance collide with declining funding and resources with which to meet those demands, effective, efficient, and strategic allocation and reallocation of scarce resources becomes increasingly important. Community college leaders must address these urgent and critical challenges through the prioritization of academic and administrative programs. Careful, deliberate, and strategic resource allocation decisions must become standard operating procedure.

Because prioritization efforts in and of themselves are resource intensive, community college leaders need to approach prioritization in an efficient and effective

manner. This evaluative study of program prioritization efforts by community colleges offers insights into prioritization practices in use by community colleges and identifies best practices, lessons learned, and pitfalls to avoid to ensure successful prioritization outcomes.

CHAPTER TWO: LITERATURE REVIEW

INTRODUCTION

The terms used in the literature in reference to prioritization work vary. As stated previously, in this study prioritization is defined as a process by which a framework of criteria and measures is used to make informed and consistent programming decisions to ensure that resources are allocated or reallocated strategically and efficiently. Additional terms used to refer to the prioritization process include budgetary or resource allocation, reallocating resources, repartition of resources, academic restructuring, academic structure analysis, decision rules in academic program closure, program review and discontinuation, and academic retrenchment. To avoid confusion, the term "prioritization" will be used throughout this review of the literature.

While program prioritization in higher education is not new, prioritization efforts at community colleges are a relatively recent practice. A survey conducted by Academic Impressions, a provider of higher education professional development products and services, and found that while 58 percent of private colleges and universities and 51 percent of public universities reported having undertaken a prioritization effort, only 28 percent of community colleges had (Mrig, A., 2013).

The relative newness of prioritization efforts at community colleges is evident in the existing literature. The literature on prioritization in higher education—as well as related topics such as retrenchment, academic program closure, and higher education's response to changing external demands—is rather scarce and rarely focuses on the community college sector, nor does it tend to investigate holistic approaches to prioritization. The research that does exist primarily focuses on universities or all of higher education, with an emphasis on financial considerations, as opposed to considerations such as program quality, relevance, and essentiality. Nevertheless, a review of the literature does provide some insight and a base of knowledge from which to begin this important work, even though the research is somewhat limited in terms of its applicability to community colleges and this study. For this review, existing literature is organized and presented in three groups: (a) research focused on universities, (b) research focused on all of higher education, and (c) research focused on community colleges.

RESEARCH FOCUSED ON UNIVERSITIES

Michael (1998) analyzed seven different models of academic program review and discontinuation to determine their relative strengths and weaknesses, as well as the policy implications of each model. The models studied included cost, quality, market (i.e., enrollment), employment, political, academic, and eclectic. The scope of Michael's evaluation was limited by the one-dimensional approach of each model analyzed.

Michael's study provides information on the various considerations of program prioritization. However, he restricted his evaluation to a systems perspective. In Michael's

analysis, program discontinuation decisions are considered from a state-wide system viewpoint and driven by governing bodies at the state level. Furthermore, his analysis is university-focused with very little attention to community college issues.

Eckel (2002) conducted a multi-site case study to investigate the criteria used by higher education leaders when determining which academic programs should be terminated in order to "understand a complex process phenomenon" (p. 241). Eckel's approach was to investigate academic program closure decisions from an organizational behavior perspective to better understand whether such decisions reflect *decision rationality*—i.e., decisions based strictly on criteria and data—or *action rationality*, which allows political and social considerations to influence decision making to increase the likelihood of action.

Eckel conducted interviews with administrative and faculty decision makers, as well as individuals from units affected by academic program closures, at four research universities. His findings included three sets of decisions rules for discontinuing academic programs: "(1) the criteria stated by institutional leaders, (2) the decision rules used to reinstate programs earlier identified for closure, and (3) the decision rules used to close programs" (2002, p. 243).

While Eckel's research is useful in deepening knowledge about the social and political forces that shape academic program closure decisions, he did not include community colleges in his research. Consequently, because community colleges have distinctly different cultures, missions, programming, etc. than universities, Eckel's findings have only limited applicability to understanding community college prioritization practices.

Lepori, Usher, and Montauti, (2013) analyzed research on prioritization using a budgetary lens. They based their work on the EUROHESC project for the transformation of universities in Europe with a focus on "the relationship between organizational restructuring of HEIs [Higher Education Institutions] and budgeting" (p. 60). Like Eckel (2002), Lepori et al. studied the social and political aspects of prioritization, albeit with a focus on budgeting, which the researchers contend is "a central locus where [prioritization] processes can be observed and measured…" (p. 69).

Lepori et al. contend that prioritization is touted as a "rational model [to] interpret rules as tools to realize efficient allocation of resources" (2013, p. 72). However, the researchers argue that, in practice, prioritization models are "instruments strategically used by actors in order to establish their power" (2013, p. 72). The work of Lepori et al. illuminates the importance of carefully selecting data that are valid, reliable, and objective to inform prioritization decisions. If carefully and appropriately selected, data ensure that prioritization decisions are sound and transparent, thereby minimizing the impact of decisions based on politics and power alone. The researchers did not include community college prioritization models in their analysis and concentrated on the political aspects of prioritization through budgeting, as opposed to a more holistic treatment of prioritization.

In her article entitled "The Anatomy of an Academic Program Cut" published in The *Chronicle of Higher Education*, Will (2015) shared program prioritization criteria that she collected during interviews with university administrators. Criteria considered in program elimination decisions varied by institution. Examples of elimination criteria included program cost, enrollment, curriculum overlap, relevance to the workforce, essentiality to

the mission, growth potential, regional need, regional demographics, success of graduates, uniqueness, and program history.

Will's criteria are useful in understanding the factors considered by these universities in their prioritization efforts. However, the article also serves to illustrate differences between prioritization efforts at universities and those at community colleges and the need for more research specific to community college prioritization. For example, some of the prioritization criteria used in the decision-making processes reported by university leaders, such as program uniqueness and history, would not likely carry as much weight in program prioritization decisions at most community colleges. Furthermore, the focus on program cuts, as opposed to program priorities—which can and should also include decisions to infuse some programs with additional resources, as indicated by the data—tends to be reactionary and not particularly strategic.

RESEARCH FOCUSED ON ALL OF HIGHER EDUCATION

The seminal reference in program prioritization work is Robert Dickeson's (2010) book, *Prioritizing Academic Programs and Services*. Dickeson proposes ten recommended criteria for evaluating academic programs and administrative services. They include:

1. History, development, and expectations of the program
2. External demand for the program
3. Internal demand for the program
4. Quality of program inputs and processes
5. Quality of program outcomes
6. Size, scope, and productivity of the program
7. Revenue and other resources generated by the program

8. Costs and other expenses associated with the program
9. Impact, justification, and overall essentiality of the program
10. Opportunity analysis of the program (p. 66)

Some of the criteria used by universities represented in the research conducted by Will (2015) are aligned with the criteria recommended by Dickeson, including program cost (#8), enrollment (#6), relevance to the workforce (#2), essentiality to the mission (#9), growth potential (#10), regional need (#2), success of graduates (#5), uniqueness (#9), and program history (#1). However, because Will addressed only those decisions focusing on eliminating programs to alleviate financial shortfalls, her research is only marginally applicable to Dickeson's model.

Dickeson also offers guidance on how to implement program prioritization efforts to increase the likelihood that those efforts will be effective and fruitful. The Dickeson model is comprehensive and involves prioritization of both academic and administrative programs. The process suggested by Dickeson is inclusive and utilizes a committee approach whereby representatives from stakeholder groups throughout the institution are involved in developing and implementing a prioritization process customized to the institution.

Several universities that have implemented Dickeson's model—including Drake University, Northern Kentucky University, Notre Dame of Maryland University, and the University of Wisconsin-Eau Claire—have been pleased with their outcomes. Drake University in Des Moines, Iowa, reported that program prioritization has helped them "weather economic turbulence" and make them "fiscally and academically stronger than ever," while at the same time transforming the culture and "collective psyche" of the

campus community (Payseur, 2010, para. 1). Ken Kline, Budget Director at Northern Kentucky University at Highland Heights, reported reallocating $7.3 million over a two-year period as a result of prioritization efforts. Kline added that the process "… served [them] well and accomplished budgetary realignment in a manner consistent with… strategic priorities" (Payseur, 2010, para. 20). Rick Staisloff, Vice President for Finance and Administration at Notre Dame of Maryland University, reported that using a data-driven approach to reallocation discussions and decisions has helped to "… avoid 'arguing about the facts' and focus the college's attention on key decisions about reallocation and investment" (Payseur, 2010, para. 11). Like Drake University, the University of Wisconsin-Eau Claire leveraged the Dickeson model of program prioritization to drive cultural change and use data to "move forward to become the nimble, collaborative, transparent, and evidence-based university our vision demands" (Brukardt, Jamelske, & Phillips, 2011, "We Built the Plane and More," para. 6).

While Dickeson's prioritization model is a valuable initial reference for community college leaders who are ready to undertake a prioritization effort, its intended audience is all of higher education, and it tends to be most applicable to the university sector. Because fundamental organizational factors—including missions, funding, resources, students, stakeholder groups, culture, and politics—are somewhat different at community colleges than those at public and private universities, community college leaders may find that the Dickeson prioritization model is not always relevant or applicable. Furthermore, the process proposed by Dickeson is very time and resource intensive. The case studies available on the use of the Dickeson model focus on university settings, and all reference

using institutional research, planning, and administrative resources at a level that is not often available at community colleges. Also, the very nature of community colleges necessitates the need to respond quickly to changing local economies and employer demands. Consequently, application of the Dickeson model may not be feasible as it is onerous, time-consuming, and requires resources beyond the reach of most community colleges. Dellow and Losinger (2004), whose research is discussed under the "Research Focused on Community Colleges" section of this review of the literature, agree that the Dickeson model is not a good fit for community colleges. As stated by Dellow and Losinger, "The process [Dickeson] recommends appears to be very logical and useful, but [too] costly in both time and funding to implement frequently enough to be practical" (p. 678).

In a pilot study conducted in 2012, Milkovich investigated academic program prioritization efforts based on Dickeson's (2010) model at institutions of higher education that varied by size and type, i.e., colleges and universities, both public and private. The focus of her research was primarily change drivers and their impact on prioritization outcomes. Milkovich also investigated non-driver variables including institutional culture, leadership engagement, board engagement, strategic approach, sustainability, process openness, process framework, and institutional resistance. Milkovich used correlation analysis in an attempt to build a predictive model whereby variables and their relative values could predict outcomes of prioritization efforts. Milkovich found that "the strongest correlation with positive results for those institutions that had completed academic program prioritization was found in strategic drivers and strategic approach" (2012, p. 25).

Milkovich's work helps to advance the knowledge of factors contributing to successful program prioritization; however, the scope of her pilot study was rather narrow as her purpose was to investigate the predictive nature of change drivers on prioritization outcomes. Furthermore, her sample size was small. Of the 20 participants in Milkovich's study, only seven had actually completed the prioritization process and could report on outcomes. As is the case with most of the available research on prioritization, Milkovich did not focus her efforts on community colleges and did not identify specifically the type of institution (community college vs. four-year vs. graduate) that participated in the study. The researcher indicated that she "assumed that size and type were not significant factors driving the need to prioritize" (2012, p. 6). Thus, Milkovich did not disaggregate data by institution type or present any findings specific to the community college sector.

Survey results published by several higher education journals, including *Higher Ed Impact* (April 2013) and *Dean & Provost* (June 2011), offer additional insights into prioritization plans and implementation strategies developed by higher education institutions. Results from these surveys offer insights into which institutions are developing and implementing program prioritization efforts, why or why not, the various approaches to program prioritization, and some of the lessons learned. These insights can guide efforts with regard to how to develop the best program prioritization models possible, as we can apply the lessons learned by those institutions that have already undertaken prioritization.

Unfortunately, these survey results provide very little data specific to community colleges. While survey respondents include a variety of higher education institutions in the

United States, Canada, and the Caribbean, neither *Higher Ed Insight* nor *Dean & Provost* shared data from their surveys disaggregated by institution type. In addition, while selected summary data were reported, detailed information on questions posed and the responses to those questions were not provided. For these reasons, these survey results do very little to advance understanding of how to develop and implement a successful prioritization model for use by community college practitioners.

RESEARCH FOCUSED ON COMMUNITY COLLEGES

As stated previously, research on program prioritization practices at community colleges is very limited and/or not directly applicable to these institutions. The research that does exist tends to focus on financial considerations, as opposed to broader considerations reflective of institutional desires to operate more efficiently and offer the best possible education opportunities to students and the highest possible value to the communities served. As such, the available research lacks information on more holistic approaches to community college prioritization initiatives.

El-Khawas (1994) studied responses to severe financial pressures using a sampling of all public higher education institutions (N=296). According to El-Khawas, reported approaches to address financial pressures fell into four categories: (1) tighter expenditure control, (2) new fundraising, (3) reorganization, and (4) increased scrutiny of academic programs. While her study included data from a sampling of all public higher education institutions, El-Khawas also explored differences in approaches by institution type, which she defined by 1987 Carnegie classification, i.e., community colleges, comprehensive

universities and colleges, doctorate-granting universities, and research universities. Therefore, El-Khawas's research does offer information on prioritization that is specific to the community college sector.

El-Khawas found that when compared to other institution types, community colleges were distinctive in that they tended to respond to financial crises by developing programs jointly with business more often than their university counterparts. Furthermore, while community colleges were similar to universities in addressing financial crises through budget cuts and reorganization of administrative and academic units, they were far less likely to increase fundraising, increase fees for student services, or reorganize student services.

Because El-Khawas did shed some targeted light on community colleges and their distinctive approaches to prioritization strategies catalyzed by financial crises, her work supports the premise that community colleges are distinct from other higher education organizations and that uniqueness requires different approaches to prioritization. However, the utility of El-Khawas's work to a greater understanding of community college prioritization is somewhat compromised, as it is dated and narrowly focused on actions in response to financial crises.

Gumport (2003) studied community college prioritization practices tangentially by conducting a series of focus group meetings with community college presidents to investigate how community colleges responded to external economic and political pressures during the last quarter of the twentieth century, which Gumport describes as an era of transition in public higher education. According to Gumport, due to "contemporary

environmental pressures… there is uncertainty over which organizational priorities and practices to pursue, given multiple external pressures and a range of behaviors among successful peers" (p. 40). Gumport posited that in "redefining whom colleges serve and how," i.e., through prioritization, community colleges have been forced to attempt to strike a balance between employing industry logic, which "puts a premium on economic priorities, valuing most highly those contributions that directly strengthen the economy and organizational practices that attend to market forces" and social institution logic, which "enables the legitimate pursuit of a broader range of activities under the rubric of educational and democratic interests" (pp. 41, 54).

To learn more about how community colleges have responded to internal and external pressures, Gumport conducted "five, day-long focus groups with thirty public college and university presidents" (2003, p. 44). Among the expectations identified by the presidents who participated was the presumption that community colleges, more than any other segment of higher education, are expected to meet the demands of market forces while also providing programs and services to meet a broad range of educational needs and democratic interests. This expectation that community colleges continually adapt and transform themselves makes prioritization extremely important. Gumport summarized the thoughts of the presidents who participated in her study as follows,

> [C]ommunity colleges may attempt to do all that is asked of them, yet they are still open to criticism for not doing it well enough or fast enough… the presidents assert that the challenge needs to be reframed from one of keeping up with changing demands to considering which demands need to be heeded under what circumstances; rather than simply falling in line with what is feasible, they should be selective and question what is appropriate. (2003, pp. 45-46)

Gumport concluded that community colleges have risen to the challenge of meeting the needs of conflicting demands and can serve as models to other segments of higher education,

> By re-infusing educational purposes into contexts that put a premium on all things economic, community colleges may demonstrate the possibility of restructuring for the market while still promoting educational values and fortifying commitments to academic ideals for which there is currently little demand. With experience reconciling such competing pressures, community colleges may offer exemplary practices for other segments of higher education rather than being perceived by the academic community as a bottom rung of the prestige ladder. (2003, p. 56)

Similar to El-Khawas (1994), Gumport's findings support the position that effective community college program prioritization is significantly different than prioritization efforts at public and private universities. Gumport takes this assertion a step further and suggests that perhaps other higher education institutions could learn from community colleges and their prioritization practices.

Gumport's research supports the position that prioritization is increasingly important. As stated by the researcher, "How these issues are framed, how presidents perceive pressures, and what their colleges do are all significant for the future of community colleges…" (2003, p. 54). However, Gumport's research is also dated and does not extend or enhance current knowledge about how to best undertake prioritization work at community colleges.

A case study analysis conducted by Dellow and Losinger (2004) is most closely aligned with the study presented herein. Dellow and Losinger assert that in attempts to be responsive to changing programming needs, community colleges tend to "change our

academic programming by accretion rather than program modification or deletions based on systematic program review…. The resulting low-enrolled and overstaffed programs or oversubscribed and understaffed programs cause major budget challenges" (p. 678).

To help address these challenges, Dellow and Losinger reported on academic program prioritization strategies implemented at Broome Community College (BCC) in Binghamton, New York, after the college experienced a significant increase in enrollment in the early 1990s, followed by a five-year decrease in enrollments that resulted in a 20 percent decrease in full-time equivalent (FTE) students. The researchers describe the use of a longitudinal (ten-year), "departmental-based enrollment and cost-per-credit hour analysis that would be updated annually and shared widely across the campus" (2004, p. 679). Data are presented annually in the *BCC Enrollment and Cost Trends Report*, which is used to inform program prioritization and resource allocation and reallocation decisions. Dellow and Losinger also share strategies to gain support from the campus community, while building a culture of data-informed decision making.

Enrollment trend data were calculated by tallying FTE enrollment by the department in which courses were taught, as opposed to program major. The report also includes one-year and ten-year change data for each department. Explanatory comments are included where needed. Table 1 shows an example of enrollment trend data as presented.

Table 1. *Example of BCC Enrollment Trend Data*

Department	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	1 Year % Change	10 Year % Change
Business	59	70	67	67	59	65	69	81	78	108	92	-15%	58%
Liberal Arts	450	420	411	405	400	398	342	419	445	445	471	6%	5%
Health Sciences	119	113	107	128	136	113	98	91	89	92	101	10%	-15%
Technology	118	141	136	117	107	85	85	81	71	63	65	3%	-45%

Note. 1 FTE = 30 student semester hours

Source: Dellow & Losinger, 2004, p. 681

Cost data, which were prepared by campus budget officers, were allocated in accordance with educational reporting recommendations provided by the National Association of College and University Business Officers (NACUBO). Great care is taken to ensure that costs are allocated accurately to the appropriate departments. Finally, costs per credit hour were calculated by dividing each department's costs by its enrollment. Non-instructional department costs were calculated by dividing all non-instructional costs by total campus enrollment. Table 2 depicts an example of cost per credit hour trends presented in the annual *BCC Enrollment and Cost Trends Report*.

Table 2. *Example of BCC Cost per Credit Hour Trend Data*

Department	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	1 Year % Change	10 Year % Change
Business	149	161	172	172	153	159	139	153	128	154	20%	4%
Liberal Arts	52	55	57	60	61	69	67	71	73	72	-1%	38%
Health Sciences	199	220	185	178	183	211	227	234	242	222	-8%	11%
Technology	179	187	210	229	269	285	302	364	407	389	-4%	117%
Non-Instructiona	3.93	4.03	3.78	4.12	4.65	5.80	5.89	5.98	6.28	6.37	1%	62%

Source: Dellow & Losinger, 2004, p. 681

Dellow and Losinger report that reaction among constituents to the cost analysis data were initially mixed, but, over time, college administration has been able to demonstrate its value.

> There was general concern that the administration would make cuts and redistributions solely on the basis of the cost study, despite the administration's assertions to the contrary…. After a decade of use, there is a general knowledge that the administration uses the information to prioritize personnel decisions, budget allocations, and programming planning… [and] that budgeting decisions are based more on good data rather than political decisions. (2004, pp. 682-683)

The researchers also note that in order to ensure credibility of the report and counter detractors, "source documents used for the analysis were primary source documents that were a matter of public record and verifiable by anybody" (2004, p. 680).

The work of Dellow and Losinger is specific to a community college and helpful in understanding the unique challenges and successful strategies of prioritization in the community college sector. However, the applicability of this study to other community colleges is somewhat limited by the use of only one institution in the case study. It is further limited because data used to inform prioritization decisions at the subject institution, i.e., Broome Community College, are restricted to enrollment and cost data. While Dellow and Losinger speak to the importance of communicating that enrollment and cost data are not the only factors to be considered when making academic programming decisions, the researchers do not provide information on other criteria to be considered other than those recommended by Dickeson (2010), which they agree are cumbersome to collect data for and may not be well-suited to community colleges.

Another single-institution case study report by Grinde, Newman, and Ewing, (2005) very briefly describes the approach to the reallocation of resources employed by Northcentral Technical College (NTC) in Wausau, Wisconsin. NTC categorizes all academic programs into a four-tier model,

> The Premier Tier consists of programs with the greatest growth potential… The Aggressive Maintenance Tier consists of programs for which there is an ongoing economic need, but not an increasing demand for employees… The Community Services Tier consists of both programs and services which support, rather than drive, economic vitality, [and]… The Least Effective Tier includes programs with the lowest program quality scores. (p. 647)

Tier placement occurs each January and is decided based on "program quality data, which includes workforce trends" (p. 648).

Like the work of Dellow and Losinger (2004), the work of Grinde et al. is helpful as it is focused on the community college sector, yet similarly limited as it only offers insight into one institution and does not provide a level of detail necessary to guide practice and implementation of comprehensive and successful prioritization efforts in the community college sector.

Using a method similar to the cost-per-credit-hour approach taken by Dellow and Losinger (2004), Belfield, Crosta, and Jenkins (2013)—researchers with the Community College Research Center at Columbia University—developed an economic model of student course pathways to completion. The key metrics of the model are output, which is defined as completion; expenditure and revenue, from which net revenue is derived; and efficiency, i.e., expenditure per unit of output. These metrics are used to calculate "… pathway spending per student: the amount the college spends on each student as he or

she progresses through college" (p. 6). Because student pathways vary for a variety of reasons, including by program, an economic model for categorizing or prioritizing programs emerged from this research. The economic program categorization model developed by Belfield et al. contributes to data-informed program prioritization, as economic considerations are a key component in any prioritization effort. However, the value of this model is again limited to financial considerations and excludes important factors that are key to community college prioritization efforts such as community need, overall essentiality—i.e., how essential is a program to the college mission—and growth potential.

Similar to the categorical approach used by Grinde et al. (2005), Crosta and Jenkins, along with Drumm and Manning—researchers from the Center for Applied Research—presented a program categorization model at the 2013 annual convention of the American Association of Community Colleges (Jenkins, Crosta, Drumm, & Manning, 2013). The model includes program costs, return on investment (ROI), and enrollment data to categorize programs using a four-quadrant grid. All academic programs are categorized on the grid as high demand/low cost, high demand/high cost, low demand/low cost, and low demand/high cost. Figure 1 depicts the program portfolio grid presented by Jenkins et al.

This model can help community college leadership gain a more accurate and holistic understanding of the costs and benefits associated with the college's portfolio of programs, while also providing tools for discernment necessary to reduce instructional costs through gains in efficiency. The goal, according to Jenkins et al., is two-fold: (1) to have a balanced portfolio of academic programs and (2) to design more efficient program pathways to completion that benefit both students and the institution.

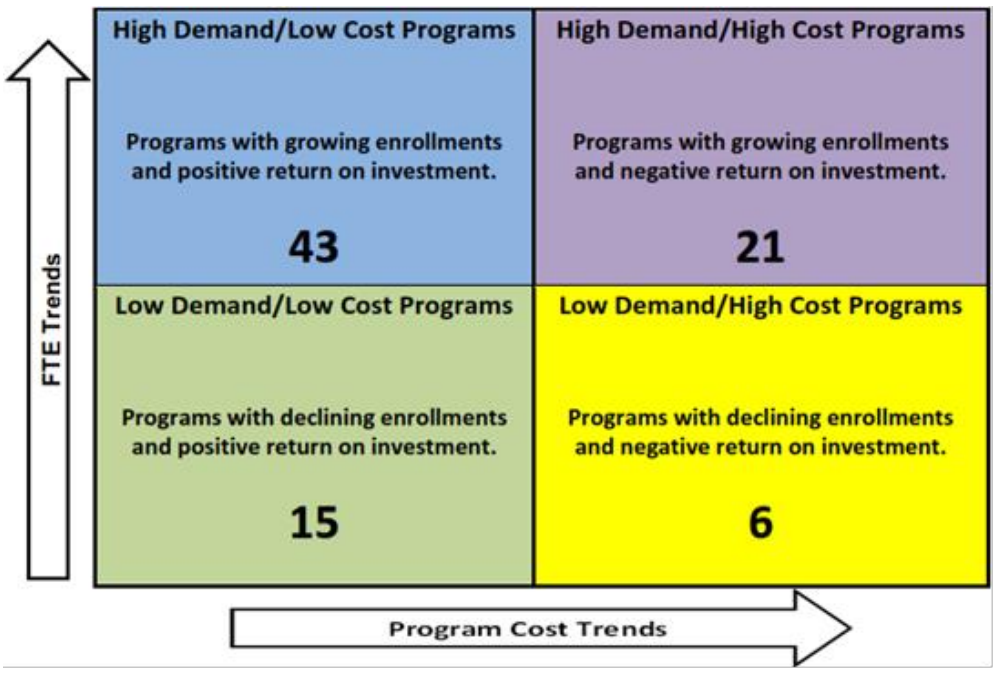

Figure 1. Program Cost and Enrollment Portfolio Grid

Source: Jenkins, et al., 2013, p. 8

While program prioritization is not the primary objective of the research conducted by Belfield et al. (2013) and Jenkins et al. (2013), the models and methodologies used to better understand financial factors and to categorize academic programs are valuable as tools to utilize in program prioritization efforts. Also, because these studies specifically and deliberately address community college issues, they are relevant to program prioritization in the community college sector. However, these studies were aimed at improving efficiencies in student pathways to completion. Consequently, much of this work is focused on the costs associated with strategies to improve retention and completion and the broader economic consequences of those strategies. As such, their utility to research on program prioritization is somewhat limited. Furthermore, the model results are drawn from a single college. Application of the model using data from additional colleges is needed to validate the reported results.

SUMMARY

This review of the literature on program prioritization presents existing research on prioritization efforts at universities, all of higher education, and community colleges. This body of work provides a base level of understanding about the various foci and approaches to prioritization taken in higher education.

However, while this research provides some important insights into facets of prioritization, no research exists that specifically addresses a comprehensive approach to prioritization in the community college sector. Such research is essential to formulate a model for data-informed, holistic resource allocation decisions with the ultimate goal of refocusing on the core mission, while improving efficiencies, quality, and value to community college students, communities, and society. Community College leaders need guidelines and best practices in order to be able to develop and implement program prioritization initiatives that take into account not only enrollment and costs, but also such key factors as program expectations, community need, internal demand (e.g., support course enrollment), elements of program quality (e.g., faculty, program relevance, and adaptability to change), program outcomes (e.g., completer job placement, transfer rates, and third-party assessment pass rates), program size and scope, and growth potential. A prioritization model well suited for use by community colleges must fit the structure and culture of this unique segment of higher education. That is, it must not be too resource-intensive and time-consuming as community colleges typically operate at a relatively lean level of staffing and must adapt and change quickly in response to internal and external demands. An effective prioritization model

must also take into account the distinctive characteristics and culture of individual community colleges. This study will help address the gaps in the literature on community college prioritization and offer insights into challenges, barriers, and best practices in prioritization practices at community colleges.

CHAPTER THREE: METHODOLOGY

INTRODUCTION

As operating budgets shrink and stakeholders demand cost-effective programming, community colleges must apply systematic program prioritization processes to identify those programs that should be kept, developed, or discontinued. Prioritization of programs for the purpose of making wise and strategic resource allocation decisions must become standard operating procedure. In the words of Dickeson (2010),

> The inescapable truth is that not all programs are equal. Some are more efficient. Some are more effective. Some are more central to the mission of the institution. And yet insufficient effort has gone into forthrightly addressing and acting on the efficiency, effectiveness, and essentiality of academic programs…. Programs should be measured with an eye toward their relative value, so that reallocation can be facilitated. Because the most likely source of resources is the reallocation of existing recourses….The institution's very being is at stake…. This is no time for campus politics as usual. (p. 23)

PURPOSE OF STUDY

The purpose of this research is to (a) raise awareness of the importance of implementing systematic, data-informed prioritization of academic programs and services; (b) evaluate current prioritization practices at community colleges; (c) identify best practices, pitfalls to avoid, and lessons learned; (d) provide guidelines and

recommendations for community college leaders interested in undertaking a prioritization effort; and (e) catalyze an increase in prioritization work as a key strategy to support and advance the community college mission.

TYPE OF STUDY

The goal of this study is to learn from the experiences of others in order to encourage and improve prioritization practices at community colleges. Therefore, a qualitative research approach is most appropriate. As stated by Merriam (2009),

> Having an interest in knowing more about one's practice, and indeed improving one's practice, leads to asking researchable questions, some of which are best approached through a qualitative research design…. [R]esearch focused on discovery, insight, and understanding from the perspectives of those being studied offers the greatest promise of making a difference in people's lives. (p. 1)

This evaluative study employs several qualitative research methods including in-depth, structured interviews and review of prioritization documents to corroborate interview responses and enhance understanding of prioritization practices.

SAMPLING METHOD

Maximum variation, purposeful sampling was used to select interview participants. According to Seidman (2013), "this sampling technique [allows]… the widest possibility for readers of the study to connect to what they are reading [and] provides the most effective basic strategy for selecting participants for interview studies" (p. 56).

PARAMETERS OF THE STUDY

Data to inform this study was collected via in-depth interviews with community college leaders and practitioners. To be included in this study, participants had to meet the following selection criteria:

1. Participant must have direct knowledge and/or experience with program prioritization practices at a community college.
2. Participant's organization must be a community college.
3. Participant's organization must have undertaken a systematic program prioritization, ranking, or categorization (e.g., support, maintain, watch, sunset, eliminate) process within the last five academic years at the time of the interview.
4. The prioritization process employed must have been data-driven to some extent.
5. The prioritization effort must have included a significant unit or units of the organization, e.g., the career education division, all academic programs, or all student support programs.

PARTICIPANT DEMOGRAPHICS

Interview participants were solicited via email from two professional organizations for community colleges; one for Chief Academic Officers and the other for Career Education Deans (see Appendix B). The researcher is an active member of both organizations. Fifteen potential participants from 14 community colleges indicated a willingness to participate in the study. All participants were from community colleges in one Midwestern state and represented institutions of varying size and location, i.e., rural, suburban, and urban.

Eleven participants were selected who met the selection criteria and so as to achieve the greatest degree of variation possible in terms of institutional characteristics

and professional role of the interviewees. One participant provided prioritization documents but did not participate in an interview. Community colleges represented ranged in size from approximately 1,600 students to approximately 24,000 students, based on 2014/2015 headcount as reported via the Integrated Postsecondary Education Data System (IPEDS). Table 3 shows 2014/2015 approximate headcount for all community colleges that participated in the study.

Table 3. *Approximate 2014/2015 Headcount at Sample Community Colleges*

College	2014/2015 Headcount*
7	1,600
9	1,800
8	4,100
3	4,500
5	5,500
11	8,900
1	9,800
10	11,500
4	15,700
6	22,900
2	24,000

Note: Rounded to nearest 100 to protect anonymity.
Source: Integrated Postsecondary Education Data System (IPEDS)

Based on IPEDS locale classification (see Appendix B), three community colleges are located in midsize cities; one in a small city; one in a large suburb; one in a small suburb; one in a remote town; one in a distant rural community; and three in fringe rural communities. Table 4 shows the distribution of community colleges that participated in the study by IPEDS locale.

Table 4: *Distribution of Sample Community Colleges by IPEDS Locale Classification*

IPEDS Locale Classification	Number of Community Colleges Represented in Sample
Rural: Distant	1
Rural: Fringe	3
Town: Remote	1
Suburb: Small	1
Suburb: Large	1
City: Small	1
City: Midsize	3

In terms of the professional roles of the participants who were interviewed (N=10), three hold the title of Provost and/or Vice President with chief administrative authority over both academic and student affairs; three are Chief Academic Officers; two are Academic Deans; one is a Director of Academic Effectiveness; and one is a Curriculum Specialist. Table 5 shows a graphical representation of the distribution of interviewees by professional role.

Table 5. *Interviewees by Professional Role*

Professional Role	Number of Interviewees Represented in Sample
Curriculum Specialist	1
Director of Academic Effectiveness	1
Academic Dean	2
Chief Academic Officer	3
Provost/VP of Academic & Student Affairs	3

FORMAT OF INTERVIEWS

Semi-structured interviews were conducted and included 26 questions grouped into four topic areas: (a) Background Information on the Interviewee and the

Prioritization Process, (b) Prioritization Model Used, (c) Evaluation of the Prioritization Model Used, and (d) Recommendations for Improving the Prioritization Process. Interview questions were a combination of multiple-choice and open-ended questions. Each interview lasted approximately 90 minutes. Nine of the interviews were conducted face-to-face and one was conducted via telephone. Participants were sent the informed consent document and interview questions in advance of the scheduled interview (see Appendices C and D).

Program prioritization documents were also collected from participating colleges, if available, to supplement interview data. Documents collected included program prioritization purpose statements; presentations; procedures and processes; data elements, definitions, and weighting used to inform prioritization decisions; committee memberships and structures; timelines and review cycles; program prioritization lists and categories; and outcomes reports.

METHODS OF ANALYSIS

Interviews were transcribed by the researcher. Interviewee selections from multiple choice questions and responses to open-ended questions were entered into an Excel spreadsheet that included the following fields: line number; participant number; question number; codes for question response, follow-up question, and follow-up question response; and a field for categorizing responses. Excel filter and sort functions were used to extract and organize data to accurately report findings, identify themes, and to support thorough and effective data analysis. Relevant and insightful excerpts

were selected and organized into categories using analysis methods recommended by Seidman (2013).

Prioritization documents were systematically reviewed, categorized, and analyzed. Prioritization documents were categorized by prioritization method—categorical or ranking, and data type(s)—qualitative and/or quantitative. The documents were then analyzed and scored for high, fair, or low process understandability, process ease of use, and decision-making usability.

Data collected from interviews and prioritization documents provided information about current practices and procedures, preferred models, identified challenges and barriers, and professional recommendations for improving prioritization outcomes at community colleges. Data were summarized and evaluated to identify best practices, challenges, barriers, pitfalls, and lessons learned.

CHAPTER 4: RESULTS AND ANALYSIS

INTRODUCTION

Research conducted to inform this evaluative study included in-depth, structured interviews and a review of prioritization documents. Qualitative data were collected from ten interview participants with direct knowledge of prioritization practices at the community colleges where they were employed at the time of the interviews. Interview questions were organized into four topic areas: (a) Background Information on the Interviewee and the Prioritization Process, (b) Prioritization Model Used, (c) Evaluation of the Prioritization Model Used, and (d) Recommendations for Improving the Prioritization Process. Results and analysis are grouped by the four topic areas with appropriate subtopics. The chapter will conclude with a discussion of the prioritization documents collected from participants.

BACKGROUND INFORMATION ON INTERVIEWEES AND PRIORITIZATION PROCESSES

Background information gathered on interviewees and the prioritization processes employed at their community colleges included professional roles of interview participants; time to completion and frequency of prioritization, and the catalysts for prioritization efforts at their colleges.

Professional Roles of Interview Participants

As stated previously, interview participants (N=10) included three individuals holding the title of Provost and/or Vice President with chief administrative authority over both academic and student affairs; three Chief Academic Officers; two Academic Deans; one Director of Academic Effectiveness; and one Curriculum Specialist. All interview participants reported playing a significant leadership role with oversight and/or coordination responsibility for the development of the prioritization process used at their respective community colleges.

Prioritization work seems to be driven primarily by academic leadership with strong support from institutional research staff. However, perhaps this is because all community colleges represented in this study had only prioritized academic programs and had not included student services or administrative functions as part of their prioritization efforts.

Catalysts

Interviewees reported that a variety of factors were catalysts for their prioritization efforts. As shown in Table 6, all ten interviewees indicated that strategic considerations were driving forces; nine cited fiscal drivers, and eight stated that environmental factors were a catalyst. Six interview participants identified other factors that catalyzed prioritization initiatives at their colleges.

Table 6. *Reported Catalysts for Program Prioritization Efforts*

Catalyst	Number of Interviewees Reporting Catalyst for Prioritization
Strategic (quality improvements, enrollment increases, improved student outcomes, proactive responsiveness to external forces)	10
Fiscal (budget crisis, cuts, or threats)	9
Environmental (new leadership, board driven, legislative pressures, increased competition, accreditation finding, changes in student demographics)	8
Other	6

Catalysts reported under the "other' category included the following:

- Faculty contract requirements for notification of program closures
- Faculty-driven
- Administration's desire to make justifiable, fair, logical, defensible programming decisions
- The data culture developed as a result of Achieving the Dream participation
- Internal accountability for academics in line with what is expected of non-academic units, and
- The need to focus and not try to be all things to all people

All participants cited multiple catalysts for prioritization efforts. This is not surprising as none of the catalysts are really discreet. For example, strategic factors tend to drive quality improvements, which ideally drive enrollment and retention and leads to more fiscal stability. However, while financial considerations were cited as a driving factor in the prioritization efforts by nine out of ten participants, all participants spoke most avidly of the desire to use prioritization to drive program improvements and make sound programming decisions for students and the community. As stated by several interviewees,

> I want to make justifiable, fair, defensible, logical decisions. Eliminating programs based on one facet of a program goes against every bone in my body. When I was asked to eliminate [one of our programs] because it was losing $30k per year, it bothered me that I didn't have a process that I could defend against that. It would have been better to have the chance to see if there was something we could do better with the program for the College and the students. I didn't have a way to evaluate the impact on the College to eliminate the program. I felt I was remiss in my responsibilities.
>
> You have to stay in touch with the job market, local needs, and community needs. If you have a program that is dying on the vine, you have to see why. Maybe there just isn't a job market out there.

When asked, "Did you include academic programs, student services, and/or administrative functions in your prioritization efforts?" all ten respondents indicated that in terms of a systematic prioritization process, only academic programs and services were included. Academic services mentioned by interviewees included tutoring, non-credit workforce training, and library services. Several participants mentioned that while there have been efforts to restructure and/or redesign student services and administrative functions, those efforts have not been particularly methodical or data-driven.

It is unfortunate if in fact community college prioritization work has not extended more into the realms of student services and administrative functions. In order for the best prioritization outcomes to be achieved, it requires a holistic approach which includes academic, student services, and administrative functions. It is possible that prioritization work beyond academic services was underreported in this study due to the fact that all participants were employed in academic divisions at their community colleges.

Time to Completion and Frequency

There was a great deal of variation in the responses to the question, "How long does the [prioritization] process take?" Time to the complete prioritization ranged from one month to several years. In terms of frequency, all ten interview participants reported that prioritization efforts were in progress, with five reporting that prioritization is an ongoing process designed to be conducted annually; one community college conducts prioritization every three years; and three interviewees reported that prioritization is implemented occasionally as the need arises. One interviewee reported that prioritization has been piloted on a limited basis and was complete in Computer Information Systems, in progress in Business, and being explored in Manufacturing and Social Sciences (See Table 7).

Table 7. *Frequency of Prioritization*

Prioritization Frequency	Number of Interviewees Reporting Prioritization Frequency
Annually	5
Occasionally	3
Every Three Years	1
Piloting with Select Programs	1

The factors that seem to influence frequency and time to complete the prioritization process include experience—i.e., how many times the college had undertaken a prioritization effort; the complexity of the processes used, and the degree to which the process is inclusive of various stakeholder groups. All five of the participants who reported conducting prioritization annually had a relatively manageable prioritization process; three of the five had a well-established process and

had completed a prioritization and least twice. Some of the comments from interviewees who reported conducting prioritization annually included;

> The first time we did [prioritization], it took about a year and a half…. It was quite extensive… [but] now it's quite easy…. In May, we just click the button and produce the reports.
>
> When we developed [our prioritization process]… it took about three months. Now it is institutionalized and part of data collection.
>
> We ask IR to give us the data by March 1. Then I sit down with the Deans and we go through it…. We always have it out by the end of March. We get through the whole process in a month.

By comparison, those who reported only undertaking a prioritization effort occasionally had only completed the process once and had struggled with relatively complex, inclusive processes. Comments included,

> The evaluation can be completed in one semester, but it takes a total of three to four semesters to overhaul and implement. You have to build trust and relationships first.
>
> It varies. The initial phase takes about one month. Then the study phase, the decision-making phase, can take from four months to over a year. I have one that has been going on for over a year now because of faculty resistance.
>
> It was a massive undertaking and took about three years. We started with a pilot of ten programs and services. Then we included 86 programs and services in our full effort.
>
> Developing the reports took many months. I worked with a programmer…. It took approximately one year. The first three to four months was heavily me working with BI to develop the metrics and reports. I spent a lot of time on it, working with the Deans, leading the conversations, asking questions.

PRIORITIZATION MODEL USED

Participants were asked a series of questions about the prioritization model they used at their community college. Subtopics included the applicability of the prioritization model developed by Robert Dickeson; stakeholder groups represented in the prioritization process; and data used to inform prioritization decisions.

Applicability of Dickeson's Model

Because the prioritization model developed by Robert Dickeson and described in his book *Prioritizing Academic Programs and Services: Reallocating Resources to Achieve Strategic Balance* (2010) is the seminal work on prioritization, interviewees were asked to respond to several questions about their familiarity with and opinions about the Dickeson prioritization model. Five of the ten interview participants indicated that they were familiar with the Dickeson model. However, only two of the five felt they had a thorough understanding of Dickeson's model and only one attempted to apply the model in their prioritization work. The interviewee who had experience with Dickeson's prioritization model indicated that its applicability was limited. As stated by the interviewee,

> We bought a dozen copies and read the book, but there were too many criteria… [and] it was too complex. We were somewhat naïve; we thought we would put in all the data and the answers would come out. If we did our due diligence, we would get a picture to follow. In a way, the model helps frame the most essential and then the least essential. But not funding the bottom 20 things did not fit our culture.

When participants sufficiently familiar with Dickeson's work (n=2) were asked if they had modified his prioritization model to align better with their community college,

one indicated that they had adopted three of Dickeson's criteria, i.e., essentiality, demand, and cost. Another interviewee stated, "I used it to help develop something that does work for us. You should be able to run [prioritization data] in a day and do checkpoints."

The two interviewees most familiar with Dickeson's model were asked to comment on the strengths and weaknesses of the model as it applies specifically to community colleges. Both felt, in general, that the Dickeson model is not a good fit for community colleges and had more to say about its weaknesses than its strengths. The strengths of Dickeson's model are that it is well established and includes some relevant criteria. Comments included,

> It is the most well-known out there. Dickeson has a method and other people have tried and tested it. I do like that he addresses quality and essentiality and relevance.
>
> The organized evaluation, set of criteria, and analysis by unit are the greatest strengths.

One of the weaknesses of the Dickeson model cited by interviewees is that it was designed more for use by universities. As stated by interview participants,

> Dickeson's model is too subjective. It is 4-year centric and unsophisticated.
>
> I have never been part of a university culture; but there is a sense that all that we do, we do for our students…. There may be more of a focus on the student at a community college. Like developmental education; we have the culture of wanting to save everyone. Prioritization faces the same challenge. Students need dev ed. Universities may not be as concerned about the student.

Another weakness cited is that Dickeson's model does not put enough emphasis on inclusion of key community college stakeholders,

> It is too centric to one audience, i.e., faculty, and not inclusive of all stakeholders that the community college has to deal with.
>
> He doesn't really hit on the importance of external stakeholders. [At community colleges], if we don't have industry partners, the program doesn't go into place. He is more focused on the discipline and the faculty.

Finally, interviewees familiar with Dickeson's work felt that his prioritization approach is just not a good fit for community colleges for a variety of reasons. Comments included,

> At community colleges, there is a very tight partnership between administration and faculty. [Dickeson] kind of ignores the management side of the business, except for financial aspects.
>
> Unless you have total confidence in the process, you are never going to pull the trigger on anything. I would rather get all stakeholders together; faculty, advisory committee, industry partners, and look at low performance and say, "Even if a program is no longer relevant… can we transform it into something else that is relevant?" If a program falls at the bottom, it doesn't mean we should automatically get rid of it. No, it means it should trigger an analysis. The product of the analysis is the decision about what to do with it.
>
> Dickeson's model is too onerous and takes too long. Dickeson puts a lot of emphasis on buy-in, but people confuse buy-in and inclusiveness. You want to be inclusive, you want to get input, but you might not be able to get buy-in; because in every case some people are going to be biased and people may not support the final outcome.

One interviewee, while not familiar with the Dickeson prioritization model, had this to say about applying a community college prioritization process at a university,

> After developing this process, I don't think in could ever go work for a four-year now. I like that I can look at legislation and say that we are here to prepare students for the local economy or to transfer [to a university]. I can really measure that. If I were to apply my model at a university, I would be like, "Cut 80 percent of these programs. What are you doing? These are unrealistic. Get rid of them."

It is interesting to note that while all interview participants had played a key role in the development of the prioritization models used at their community colleges, half (n=5) had not even heard of Dickeson's seminal book on academic program prioritization. Perhaps this is because Dickeson's work has been focused primarily on prioritization at universities, and thus, universities have been his primary target audience.

While Dickeson's work in the field of prioritization remains valuable as a reference for those unfamiliar with the basics, it is not well aligned with the mission, culture, and operational realities of community colleges. Based on this research and the researchers extensive review of the Dickeson model, factors that may have a stronger influence on prioritization work at community colleges than they do at universities include the more student and community-centered mission; closer alignment and stronger partnerships with business and industry; relatively more collaborative relationship between administration and faculty; and the more limited time and resources available at community colleges to conduct and implement prioritization processes and outcomes.

Represented Stakeholder Groups

Interviewees indicated including a variety of stakeholder groups in the prioritization process (see Table 8). The most often included stakeholder groups were full-time faculty (n=10); non-cabinet level administrators (n=9); and cabinet level administrators (n=8). Six included part-time faculty, program advisory committee members, and other staff members. Other staff members specified included institutional researchers (n=2) and one each of the following: business office staff, Curriculum Specialist, Director of Strategic Partnerships, and departmental managers/coordinators. Four included student services staff; three included employers, and two included Board of Trustee members and students. Under the "other" category, one interviewee indicated that if programs are identified for improvement, other stakeholders are brought in to the process such as enrollment services staff, advisors, or advisory committee members. Another interviewee shared that a consultant was hired to assist with their prioritization process. One interview stated that they included representation from any group with an interest in the program.

It is clear that community colleges represented in this study tried to include a variety of stakeholders in their prioritization efforts. All included full-time faculty and administrators. Interestingly, more community colleges included business and industry stakeholders, i.e., advisory committee members and employers, than some internal stakeholders, including student services staff, trustees, and students. The inclusion of business and industry stakeholder groups is not surprising given the focus on serving the local community inherent in the community college mission. However, the lack of

student services representation in prioritization work as reported by six of the ten participants in the study is somewhat surprising given the focus on student success in recent years.

Table 8. *Reported Stakeholder Groups Included in Program Prioritization Process*

	Community College Participant										
Stakeholder group	1	2	3	4	5	6	7	8	9	10	Total
Faculty – Full Time	x	x	x	x	x	x	x	x	x	x	10
Administrators – Not Cabinet Level	x	x	x	x	x	x		x	x	x	9
Administrators – Cabinet Level		x	x	x	x	x	x		x	x	8
Faculty – Part-Time	x			x	x	x			x	x	6
Other Staff Members	x		x	x	x	x		x			6
Advisory Committee Members	x			x	x		x	x		x	6
Students Services Staff Members	x		x	x				x			4
Employers/Potential Employers				x	x			x			3
Board of Trustees Members		x			x						2
Students	x							x			2
Other			x					x		x	3

The Role of Data

All interviewees emphasized the critical role of data in the prioritization process. With the exception of two major categories of criteria—external demand for the program and size, scope, and productivity of the program—which all ten colleges reported as factors they considered, interviewees reported notable variability in criteria and supporting data used to inform prioritization decisions (See Table 9).

Table 9. *Reported Criteria and Supporting Data Used in Program Prioritization*

	Community College Participant										
Criterion and Supporting Data	1	2	3	4	5	6	7	8	9	10	Total
External Demand for Program*	x	x	x	x	x	x	x	x	x	x	10
Program Enrollment	x		x	x	x	x	x	x	x	x	9
Course Enrollment	x		x	x	x		x	x	x	x	8
Labor Market Demand for Graduates	x	x		x	x	x		x	x	x	8
Community Need	x	x		x		x			x	x	6
Popularity	x								x		2
Size, Scope, and Productivity of Program*	x	x	x	x	x	x	x	x	x	x	10
Number of Awards Conferred	x	x		x		x	x	x		x	7
Number of Majors	x	x		x	x			x	x	x	7
Graduation/Completion Rate	x				x	x		x	x		5
Number of Contact/Billing Hours Generated	x		x			x			x	x	5
Number of Faculty and Staff Assigned	x				x	x	x		x		5
*Revenue/Other Resources Generated**	x	x	x						x	x	5
Services Rendered			x								1
Costs and Expenses Associated with Program*	x	x	x		x	x		x	x		7
Cost to College	x	x	x		x	x		x	x		7
Cost to Students	x								x		2
Quality of Program Outputs*	x	x			x	x		x	x	x	7
Assessment of Student Learning Measures	x				x	x			x	x	5
Employment/ Transfer Rate of Graduates	x					x		x	x	x	5
Reputation in Community and/or Beyond	x	x				x				x	4
Satisfaction Surveys	x									x	2
Faculty Performance										x	1
Third-party Assessments	x										1
Quality of Program Inputs and Processes*	x			x	x	x		x	x	x	7
Internal Demand for Program*	x		x	x				x	x	x	6
Impact, Justification, and Overall Essentiality*	x		x	x					x	x	5
Opportunity Analysis of Program*	x	x		x	x				x		5
History, Development, Expectations of Program*	x		x	x							3
Other		x			x		x	x	x	x	6
Total Number of Criteria Used**	23	9	9	11	11	12	5	11	19	17	

* Denotes criterion suggested by Dickeson.

** Where sub-criteria exist, only sub-criteria are included in total.

Criteria used by more than half of community colleges represented in this study included,

- Program enrollment (n=9)
- Course enrollment (n=8)
- Labor market demand for program graduates (n=8)
- Number of awards conferred (n=7)
- Number of majors (n=7)
- Cost to college (n=7)
- Quality of program inputs and processes (n=7)
- Community need (n=6), and
- Internal demand for the program (n=6)

Prioritization criteria reported under the "other" category also varied significantly and included,

- Total employed and openings in jobs for programs offered by degree level
- Transferability/articulation agreements
- "Completeability"
- Retention
- Strategic fit
- Graduate wages
- Level of advisory committee activity
- Number of independent studies, failures, and withdraws
- Partnerships/quality of partnerships
- Employer satisfaction, and
- Program accreditation

In terms of the total number of criteria used to inform prioritization decisions, there was also notable variation from a low of five criteria to a high of 23.

Data are critical and played a central role in the prioritization work of the community colleges represented in this study. Support from institutional research and finance staff is a prerequisite to undertaking a prioritization initiative. The availability of relevant, valid, and reliable data is necessary to assign value to the criteria used to rank and prioritize programs.

The criteria and data used by participants to inform prioritization decisions align with the reported catalysts for prioritization. The emphasis on serving external stakeholders, i.e., local business and industry, is clear as evidenced by the use of external demand data by all interview participants. Similarly, the focus on students is also evident as all ten participants included criteria and data to measure student outcomes—such as the number of awards conferred, the number of program majors, and graduation/completion rates. A majority of interview participants also reported using program cost and program quality criteria and measures.

EVALUATION OF PRIORITIZATION PROCESS USED

Interview participants were asked a series of questions designed to elicit their evaluative insights regarding their prioritization processes. Topics covered included process strengths, valuable outcomes, resistance and obstacles, negative consequences, and sustainability.

Process Strengths

When participants were asked to discuss the strengths of their prioritization process, several major themes emerged. Five interviewees stated that their process was objective, credible, and/or transparent. Comments included,

> We gave [faculty] the data without the programs listed, so they were judging how we developed the data and not whether or not the data reflected poorly on their particular program.

> It was informative for the faculty to know what areas they were having trouble with.

> It's now very numbers driven; not so much the anecdotal story, gut check. We are not accused of [having] favorites. It's more objective.

> When I developed [our process], I thought what really matters to me in this job is to make fair, objectives program decisions.

Five interviewees felt that their prioritization process catalyzed solutions-focused conversations and program improvements. Statements included,

> My group has been trained in the… decision analysis and problem-solving process. Those give you the tools to go to the next level and do weighted analysis, enable you to make decisions in a group environment, look at risk and probability of bad things happening and bring those things into your final decision, then prioritize a project to fix it.

> [There have been programs] that end up on the [watch list] for two years in a row. We can then have the conversation about changes and can put some good plans in place.

> It has really increased the positive conversations and the focus on solutions.

Five interview participants cited the focus on and use of data as one of the strengths of their prioritization process. As stated by one interviewee,

> [What went well was] the focus on data and utilizing data to make decisions. It was a foreign concept here; the mindset that performance and data matters.

Another strength cited by interviewees was that the process was inclusive (n=5). Some of the comments shared were,

> We included faculty from each program. All faculty who taught in the area were invited to the table. Because of the faculty participation and the discussions throughout the process, when the data came out, it was almost anticlimactic.

> The collaborative effort works well. Involving faculty and letting faculty help choose the committee make-up has been very helpful. The committee makes the recommendation to the VP. That I think goes well. The decision isn't just mine or the committees.

> You can't always get buy-in, but you need to be inclusive. Some people are not going to support your outcomes, but you need to be inclusive.

Other positive outcomes cited by interviewees included the process raised awareness of challenges (n=3) and was manageable (n=1).

Valuable Outcomes

There was a great deal of variation in the responses to the question, "What were some of the most valuable outcomes of your prioritization effort?" However, most interviewees spoke of various forms of program improvements, including the elimination of programs that were no longer viable (n=8). Representative responses included,

> At first, there was so much resistance, but now faculty are so proud to have curriculum that is aligned with market demands and degrees aligned with the field and transfer institutions.

> Improvements in the programs…. [One program] went from 13 [degree options] to six. They had a lot of programs that were very similar with different names. They are better aligned with the industry now.
>
> It improved programs. Graduation is higher and programs are stronger than ever…. [One program] was eliminated, but it needed to be. [Prioritization] led to a sustainable quality model.
>
> [Prioritization helped us clean] up a lot of those programs that… weren't even producing graduates. And also, trying to eliminate programs that have no full-time faculty. If the College isn't serious about hiring and staffing it, get rid of it. There's no one to oversee it.
>
> We have gotten rid of some programs that were not very viable because they didn't have employers to support them or they didn't fall into the high-wage, high-demand category.
>
> It has made us more effective because we are focused on the strategic plan and really looking at programs and saying, "This one just can't keep going." We can't be everything to everybody…. We are going to do what we can do well, and if we can't do it well, we're going to stop doing it.
>
> [The most valuable outcomes are] decisions about continuing or eliminating programs by consensus decision. That is very valuable. It has allowed us to discover things that we didn't realize…. It allows us to challenge assumptions.

Another emerging theme was that the prioritization process catalyzed objective decisions and improvements predicated on valid and reliable data (n=7). Following are several excerpts from interviewee responses,

> [We now have] a process to make rational decisions. I don't just measure revenue; I measure profit…. One of the most valuable benefits is getting a true picture of your portfolio of offerings and not letting someone from outside your area influence your perception. It reveals reality and challenges assumptions.
>
> With program [prioritization]… we can show that the societal benefits of having a program and being able to teach someone a licensable skill outweigh the fact that we might lose $10k per year…. That's a strategy

> you can deliver as an objective manager…. With prioritization, you get a true picture of your portfolio of options.
>
> We developed a cost-to-educate model that became standard. We show direct expenses and direct revenue for every academic unit in the College…. That has been the greatest value for us when we look at differential tuition.
>
> We really get to see where our money goes. You think you have a sense of that, but sometimes you don't, so that has been helpful.
>
> It makes us put some attention to completion and the importance of programs and persistence in programs. More of a focus on programs is really important.
>
> [We now have] true accountability in place for academic programs. It's not just a conversation. It's not just a threat. There truly has to be accountability with data behind it; actual measurements and metrics we are looking at for programs.

The strengths of the prioritization process and the most valuable outcomes cited by interview participants were not surprising as they aligned with the very essence of prioritization work as cited in the literature and throughout this paper. Ideally, prioritization is an objective, transparent, inclusive, and data-driven process used to make sound decisions about programs and services. It is encouraging to see that the participants in this study have realized the purported benefits of their prioritization work.

Resistance and Obstacles

Interview participants were asked to discuss any resistance or obstacle they encountered during the prioritization process. By far, the most frequently cited source of resistance was faculty fear and skepticism (n=8). Representative comments included,

> The obvious one is faculty are always skeptical about what you are going to use [the data] for. So, there had to be a step to show that the data would be used to improve programs, not just eliminate programs.
>
> The fear of the faculty [is an obstacle]. There is an assumption that we are not looking to support or develop the program but just cut it. That has been the biggest obstacle.
>
> We had some resistance from faculty and internal leadership, like advisory committees. They were convinced we were trying to kill programs.
>
> The biggest thing is that it was new. There were a lot of questions and an element of fear of the unknown.

Remaining resistance and obstacles raised were varied and included,

- Time constraints to completing the prioritization work (n=3)
- Bias and attempts to skew data (n=2)
- Pushback from advisory committees and employers (n=2)
- Unwillingness of faculty to accept implications of the data (n=2)
- Lack of clear expectations for prioritization work (n=1), and
- Lack of faculty understanding of data and the relevance of data (n=1)

Negative Consequences

Responses regarding negative consequences from prioritization were fairly consistent and centered on backlash driven by negative perceptions by faculty, and less often, from students and community members. Some responses included,

> [Negative consequences are] subject to opinion. Some of the faculty who were given notices that program fixes needed to be made do not jump on board.
>
> It's rare, but sometimes the relationships with faculty [are negatively impacted]…. There is resistance due to faculty perceptions because they perceive this as a thumbs down. They aren't buying into the collaboration like others did. It can damage relationships with faculty.

> [You do] the best you can when you implement the process to make sure that everyone is treated the same way and that it is fair and transparent. But… there will be some negative backlash from people who always like to spin things negatively.

Two interviewees were from colleges that had eliminated programs as a result of program prioritization. At those colleges, faculty members who were laid off or reassigned were not happy with those decisions. On one occasion, students and community members were rallied to protest the decision at a Board meeting. In the words of the interviewees,

> When we deactivated one program in particular…. that had full-time faculty and a big student and public following, we actually had a line of about 20 students out the door of the board meeting complaining.

> The program closure might be considered negative, but it was necessary. [Prioritization] gave us a clear picture to see that it was not a viable program. It is positive in that it gives you real data to make your decisions, even if the decision is negative.

Additional responses regarding negative consequences included faculty resistance to making indicated changes (n=2); criticism that prioritization was the flavor-of-the-month initiative with no lasting value (n=2); and perceptions that prioritization is all about finances (n=1).

Identified resistance, obstacles, and negative consequences are very consistent with the response to change in general. As stated by one interviewee, "There are always negative consequences to any change." Underlying reasons for resistance to change cited by Kanter (2012) include feelings of losing control, fear of uncertainty, concerns about competence, past resentments, and sometimes, fear of real threats. In the case of prioritization, there is a very real threat of more work that results from implementing

program changes indicated by data and, in some cases, loss of employment when programs that are not viable are eliminated.

Sustainability

Not surprisingly, all respondents intend to continue their prioritization efforts. From the perceptions of the participants in this study, the benefits of prioritization outweigh the resistance and negative consequences. Furthermore, those participants who are not conducting a prioritization annually expressed the desire to increase how frequently they are conducting their prioritization efforts. In addition, all participants reported that they are continuing to refine their prioritization processes.

Based on the responses from participants regarding the sustainability of their prioritization work, and the continued pressures on community colleges to do more with less, it is likely that prioritization efforts will increase in frequency and expand in scope at the community colleges represented in this study. Other community college leaders who are looking for objective, data-driven processes to drive resource allocation decisions may also turn to prioritization to support their efforts.

RECOMMENDATIONS FOR IMPROVING THE PRIORITIZATION PROCESS

In the last segment of the interview, participants were asked to offer their recommendations for improving the prioritization process. Interviewees were asked about additional factors to consider; weighting of criteria; additional stakeholder groups to include; and to share any additional suggestions for improvement or insights on prioritization in general.

Additional Factors

When asked if there are factors that should be considered when making program prioritization decision, but were not, most interviewees cited employment factors including labor market data (n=4), employer feedback/employment retention (n=3), and graduate employment (n=2).

> Use of labor market data that I did not have access to.
>
> We would like to improve employer feedback. Labor outcomes are a huge missing link to this,… like employment, employment success, and retention.
>
> We need a framework to effectively use employer feedback. There is a disconnect between employer feedback and reality.
>
> I want to include… [whether or not] the program graduates got jobs…. That's the missing piece. If we had that, it would be the single most important deciding factor to keep [a program] or no…. Or, maybe it would suggest major revisions.

Other missing factors cited included,

- Alignment with accreditation criteria (n=2)
- Program cost/ROI (n=2)
- Advisory committee feedback (n=1)
- Economic impact of the program (n=1),
- More input from faculty leadership (n=1), and
- Student feedback (n=1)

With regard to student feedback, there was some disagreement. One interviewee liked the idea of including student feedback. Another had this unique perspective,

> I don't believe in surveying current students. They don't know enough. They are counting on us to give them the right product.

Participants recognized employment-related factors as vital in prioritization decision-making; however, it is clearly challenging to get valid and reliable data aligned with employment criteria. While employment data providers—like Emsi and Burning Glass—do offer access to relevant data, use their services may be too costly, time intensive, or sophisticated for use by some community colleges. Furthermore, reliable data on graduate employment seems to elude all community colleges represented in this study.

While only two interviewees cited financial factors to be added to future prioritization efforts, many expressed discontent with the quality of the financial data available to them. Only one participant in this study expressed high confidence in the program cost/ROI data used in their prioritization process. Perhaps the methodology used to determine program cost/ROI at that institution is worthy of further study.

Weighting Criteria

When asked if prioritization decision criteria should be weighted equally, seven participants responded that they should not. Two interview participants said that while all factors are weighted equally, during the analysis phase, some factors are considered more important than others. One interviewee indicated that they are testing the premise that all factors are equally important.

Interview participants were then asked what factor or factors should be weighed more heavily than others (See Table 10). Eight interviewees cited external demand for the program, particularly labor market demand (n=6) and community need (n=4), as the

most important factor to consider when making prioritization decisions. Several interviewees expressed rather strong opinions that external demand is essential.

Table 10. *Criteria That Should Be Weighed More Heavily in Prioritization Decisions*

	Community College Participant										
Criterion and Supporting Data	1	2	3	4	5	6	7	8	9	10	Total
External Demand for Program*	x	x		x	x	x	x	x	x		8
Labor Market Demand for Graduates	x	x			x	x	x	x			6
Community Need					x	x	x		x		4
Program Enrollment									x		1
Course Enrollment									x		1
Quality of Program Outputs*		x	x			x			x		4
Assessment of Student Learning Measures									x		1
Employment/ Transfer Rate of Graduates		x	x			x					3
Reputation in Community and/or Beyond						x					1
Third-party Assessments						x					1
Opportunity Analysis of Program*	x			x	x				x		4
Size, Scope, and Productivity of Program*						x			x		2
Number of Awards Conferred						x					1
Number of Majors									x		1
Graduation/Completion Rate						x					1
Number of Contact/Billing Hours Generated						x					1
Number of Faculty and Staff Assigned						x					1
*Revenue/Other Resources Generated**									x		1
Costs and Expenses Associated with Program*						x					1
Cost to College						x					1
Cost to Students						x					1
Impact, Justification, and Overall Essentiality *			x								1
Other	x					x	x		x		4

* Denotes criterion suggested by Dickeson.

Statements included,

> If [the program] isn't aligned with work or transfer, you're done.
>
> It's a go or no go. If students can't get jobs or our Arts and Sciences courses don't transfer, what is the point? Students come here for jobs.
>
> We can have great numbers and plenty of graduates, but if no one is hiring our graduates, what is the point?

Factors cited under the "Other" category included activity of advisory committees (n=1); community politics (n=1); industry support (n=1); and program accreditation (n=1).

It is not surprising that interview participants placed more value on labor market demand and community need than other prioritization factors. This collective response closely aligns with the high level of importance community colleges place on graduates getting jobs and their strong connections to their external stakeholders, i.e., business and industry partners and the communities they serve.

Additional Stakeholders

When interview participants were asked if they felt that all important stakeholder groups (e.g., students, faculty, staff, administrators, trustees, advisory committee members, employers) were represented in the prioritization process, four stated that they had included all important groups and six expressed that they could be more inclusive (See Table 11). Enhancing inclusion of external groups was cited most frequently and included advisory committee members (n=5) and employers/potential employers (n=4). Internal stakeholder groups cited included the following:

- Students (n=3)
- Trustees (n=2)
- Full-time faculty (n=1)
- Part-time faculty (n=1), and
- Other staff members (n=1)

Table 11. *Groups That Should Be Included in the Prioritization Process, But Were Not*

	Community College Participant										
Stakeholder group	1	2	3	4	5	6	7	8	9	10	Total
Advisory Committee Members		x				x	x	x	x		5
Employers/Potential Employers						x	x	x	x		4
Students					x	x	x				3
Board of Trustees Members		x					x				2
Faculty – Full Time									x		1
Faculty – Part-Time								x			1
Other Staff Members						x					1

With the exception of external stakeholders, participants seemed to believe they had included all important stakeholders, for the most part, with the noted exceptions. The desire to be more inclusive of advisory committee members, many of whom are often also graduate employers, and other employers may very well be another indication of the need for more employment related data to inform prioritization decisions.

Additional Recommendations and Insights

The final survey question was an open-ended question designed to elicit additional suggestions for improvements in program prioritization efforts or any other

insights that interviewees wanted to share about prioritization in general. The responses to this question varied greatly. However, several major themes emerged including the importance of data, the influence of politics, and managing the portfolio of programs offered.

The Importance of Data

The importance of data to prioritization efforts was the most frequently mentioned factor in response to the final survey question. Eight interviewees discussed the need for valid and reliable data and many expressed frustration at not having easy access to data. Following are a selection of representative comments,

> [We need] better data. I have data, but the quality is always questionable…. We are supposed to have a dashboard that we really don't have yet. It takes way too long to do this; to get data that we can trust.
>
> I am frustrated with our IR department. We will need better support from IR to get to the data standardization that we are looking for.
>
> We need a model that we can run more often than the typical 3 to 5 years…. It shouldn't be an onerous process. You should be able to pull the numbers out of a real-time data system.
>
> One of the negatives is that these are all lagging indicators; all rear view mirror stuff, some almost a year ago. Trying to get leading indicators in higher ed is really hard.
>
> Another shortcoming is the lack of employment data. We can't get good employment data. We don't have a good way to get it. It's frustrating.
>
> We need to include ROI [Return on Investment] data for all programs.
>
> I want to refine the cost out of programs. It was cumbersome…. I want to get it down to revenues, expenses, and staffing. I am trying to find a number that is comparable, like expenses per contact hour, a financial indicator that you can use to compare programs.

> I came from [another community college] and we had what we called an ROI, which was this completely convoluted formula that was just not useful. We're not trying to make money here; we're just trying to cover costs…. It doesn't include overhead. That to me was irrelevant.

An effective prioritization process is not possible without access to valid and reliable data. The participants in this study expressed frustration over the lack of availability of some data—particularly employment data and financial data—as well as the time it takes to get the data needed to inform prioritization decisions. Prioritization work would benefit from some concerted attention and effort toward addressing the deficiency of readily available data, especially employment and financial data.

The Influence of Politics

Six interviewees mentioned the influence of political factors on prioritization efforts and that politics can get in the way of implementation of prioritization outcomes. Comments included,

> There are still more programs that I think we should deactivate, but we won't [deactivate some of them] because of the politics.

> We could still do a better job of making some decisions that we could on some programs. We still are trying to play nice. I'm still not sure we are making the really hard decisions. The gain is not worth the battle.

> [Prioritization] should be standardized and formalized in terms of expectations. We now have a good model and need to formalize it. We used environmental scanning, but politics got in the way. The process becomes empty if no one is required to take action.

> We need more intentionality around the [prioritization] work. We need institutional level support. In some cases, there are very contentious battles. It is important to set clear expectations; it's okay to have institutional expectations. People need to understand the importance of this work to our making progress.

> Community need, community factors, and politics come into play. You make a decision strictly on data… [and determine that a program needs] to go, but community factors and politics say, "No, you can't close this program."

Political factors will always be at play and can influence, even stifle prioritization outcomes. Inclusivity, ensuring a credible and transparent process, and commitment from top leadership will help ensure that prioritization work is effective and outcomes are successfully implemented.

Managing Your Portfolio of Programs

Five interview participants made some reference to the importance of managing the portfolio of programs offered at their college. Some interviewees mentioned the need to reduce the number of program options, others talked about balance or the discontinuation of programs that are no longer viable or valuable to students. Some of the comments included,

> Our job, as CAOs, is to manage our portfolio of programs like stock. We are going to have some that don't make money, but we are going to have a lot of them that do.

> We had 180 [programs] when I got there. It was too many…. There is way too much overlap. I think Harvard has like 43 majors with one full-time pathway through each. [Some community colleges] give students choices on over 200 programs…, yet our students are less equipped to deal with those choices compared to the Harvard students.

> [One program area] went from 13 programs to six programs. They had a lot of programs that were very similar with different names; they are better aligned with industry now.

> Ultimately, if you are paying attention to your portfolio of offerings, you want to put energy in to skew toward the top end…. You don't want a bunch of dogs or personal preference programs. Not boutique programs,

> because often there is a niche for boutique programs. What I am talking about are programs that there isn't even a demand for….
>
> [My college], like all community colleges, has a difficult time letting go. We have no problem adding programs, but we can't seem to let go of them.

When it comes to academic program prioritization, managing a community college's portfolio of programs is ultimately what prioritization is all about. As defined previously, program prioritization is a tool to help community college leaders decide what programs should be phased out, what programs should be infused with resources, and what new programs should be developed.

Additional Insights

Some of the other insights shared by participants included the importance of being committed to the prioritization process (n=4); applying prioritization processes to new programs (n=4); and the importance of being able to explain prioritization decisions in a way that others understand them (n=3).

Prioritization is hard work and can be fraught with emotion and backlash from those who are resistant to changes indicated by the process. Consequently, you must have a strong commitment to the prioritization process and outcomes. As stated by one interviewee,

> You have to have a genuine commitment by your President and your Board. You must be open with information, including financial information, and build trust. When you use a cross-functional team of faculty and different levels of administration, there is learning that takes place. You have to have strong IR; data really help.

Even though the majority of the interview responses were related to applying prioritization process to existing programs, it is important to note that a very similar process can and should be employed when community colleges are considering new programs. Several interview participants discussed alignment with prioritization and their processes for assessing the feasibility and potential of new programs. Comments included,

> We use a similar process as part of our new program development process. The first thing we do is try to develop business partners. If we can't develop strong business partners, then it probably isn't a viable new program. We approach a lot of the same things, but we ask the questions differently.

> [Another prioritization] outcome is a comparable program feasibility process…. We need the evaluation of feasibility factors before [a new program] even gets to curriculum council, so we don't put non-viable programs in place, realizing that there is always some risk.

The ability to clearly and effectively communicate prioritization results is important to help ensure successful implementation of prioritization outcomes. Communication is particularly important if the prioritization process leads to decisions to close programs. Several interview participants spoke of the importance of being able to communicate data and the prioritization decisions based on those data. Comments included,

> If I can show the Board the data to support the decisions, I may get support from the Board. When given a complete analysis and comparison, they can feel it is well thought out and may go along with the decision.

> It needs to be something that can easily be done on an annual basis that has indicators that can easily be communicated that will initiate improvements, if possible.

> If we eliminate a program, I want to be able to present a case that we did it in a fair and logical way that the Board can understand and that the public can understand. The presentation of the results needs to be understandable to our external audiences and the Board of Trustees.

Finally, several interviewees talked about the benefits of prioritization work as a form of accountability with both internal and external stakeholders.

> [Prioritization] is absolutely a great thing to do, especially on a regular basis. It takes away that fear. It just becomes a normal course of business. It has helped with the frustration of non-academic areas. They felt that whenever reductions had to be made at the institution, they were always made in non-academic areas and we weren't being held to the same level of accountability. So this helps level the playing field. We all have that same level of accountability. We have certain metrics that we have to meet and it's not just a blank check that we are entitled to.

> [One of the benefits of prioritization is] the goodwill you generate from making really good program choices. In the end, that comes back to you when you need to ask your community to support you. That helps people understand our place in terms of the societal benefit to the community. But if I make really bad choices about the programs we offer, and I have a bunch of one-off programs that have 2 or 3 graduates a year who don't get jobs, I'm not proud of that. Word gets around.

Certainly, accountability within community colleges, as well as externally with the publics we serve locally and collectively is increasingly imperative. Consumers are more discerning and critical of higher education. Federal and state lawmakers continue to call for accountability, increases in performance, and measures to prove we are worthy of our share of public funding.

PRIORITIZATION DOCUMENTS

Eight of the ten interview participants shared prioritization documents. In addition, one respondent who did not participate in an interview provided prioritization

documents. The format and volume of documentation provided varied widely. Some documents were very data intensive, while others added a narrative component.

Prioritization documents were reviewed relative to the following characteristics: prioritization method, data type(s), process understandability, process ease of use, and decision-making usability (See Table 12).

Table 12. *Characteristics of Prioritization Documents*

Community College Participant	Prioritization Method		Data Type(s)		Understand-ability			Ease of Use			Decision Making Usability		
	Categorical	Ranking	Qual	Quan	High	Fair	Low	High	Fair	Low	High	Fair	Low
2	x			x		x			x		x		
3	x			x		x			x		x		
4	x		x	x		x				x		x	
5	x			x	x			x			x		
6		x		x			x		x				x
7	x			x	x			x			x		
8		x		x	x			x				x	
10	x			x		x		x			x		
11		x	x	x		x			x			x	

Six respondents categorized programs based on prioritization data. Examples of prioritization program categories used included,

- Warning, watch, or growth potential
- Deficient, marginal, achieving, valued, or benchmark
- High demand/high net revenue, high productivity/minimal net revenue impact/no change in resources, high productivity/minimal net revenue impact/change in resources, or low productivity, and
- Enhance funding, maintain funding, reduce funding, or eliminate the program.

Three respondents simply ranked programs based on a composite score from highest to lowest priority.

Prioritization documents provided by all eight respondents included quantitative metrics and data. Two of the eight also included qualitative data. Examples of qualitative data included,

- Description of the alignment of the program to the college's mission, vision, values, and strategic plan
- Program impact statements
- Description of internal and external stakeholder relationships
- Description of program modifications and/or adaptations to changes in the field, and
- Descriptions of the degree to which the program has met original expectations.

Prioritization documents were rated in terms of their understandability, ease of use, and usability for decision making. Of course, these factors and the complexity of the prioritization documents were reflective of the complexity of the prioritization process itself to some extent.

Documents with high understandability were those that described the prioritization process in a clear and concise manner; used familiar language and terms commonly understood by community college practitioners; included clear definitions of criteria used, and included information on relevant institutional research methodologies and data definitions. Documents missing one or two of these factors received fair understandability scores and documents lacking in more than two understandability factors received low understandability scores. Process understandability score

distributions were high understandability (n=3); fair understandability (n=5); and low understandability (n=1).

The ease of use of the prioritization process as gleaned from the prioritization documents was also assessed. Documents with high ease of use were those that were concise and presented information and data in a manner that was easily digestible for the reader. By contrast, very complex and voluminous prioritization documents have low ease of use. The distribution of ease of use scores was high ease of use (n=4); fair ease of use (n=4); and low ease of use (n=1).

Finally, prioritization documents were scored on their usability for prioritization decision-making. Categorical prioritization is inherently more effective than simple ranking prioritization for decision making. Simply ranking programs requires additional decisions regarding the actions to be taking for various rankings. For example, should the lowest five ranked programs be eliminated or modified? Or, should community college leaders concern themselves with the lowest ten programs? Presentation of prioritization data is also an important factor to consider. Data presented in a clear and concise format supports meaningful discussions and has greater utility for decision making to improve prioritization outcomes. Prioritization documents that included prioritization categories and presented data in a clear and concise format received high scores. Those that used a ranking prioritization system or used a categorical system but did not present data in a clear and concise format were rated as fair. Prioritization documents that did not use prioritization categories and did not present data in a clear and concise manner have low usability for decision making. In the usability for decision-

making category, prioritization documents fared slightly better than they had in the other two usability categories, with five scoring at high usability, three at fair usability, and only one at low usability.

Clearly, some prioritization documents were easier to understand and use than others. It is interesting to note that only two prioritization document sets were assessed as having high understandability, high ease of use, and high decision-making usability. Both documents sets were from community colleges that only included quantitative data in their prioritization process, which may account for the relatively higher understandability of their prioritization documents. Other commonalities included a clear and concise explanation of the prioritization process and accompanying data; and an executive summary of prioritization findings.

SUMMARY

A significant number of community colleges in the Midwestern state where this study took place are engaged in some form of program prioritization work. A call for participants resulted in responses from individuals representing 14 different community colleges. The data presented in this chapter were collected from eleven participants from ten different community colleges. The results indicate that there is notable variation in the ongoing prioritization work at the community colleges represented in this study. Also, it appears that most of this work is focused on academic program prioritization with very little attention being given to student services or administrative program prioritization.

There appears to be no one-size-fits-all model for program prioritization work undertaken at community colleges. Unique cultures, challenges, characteristics, circumstances, etc. influence the approach and model that is right for each institution. Experience with prioritization is also a factor to be considered. Interviewees that reported completing a prioritization initiative several times indicated that changes and improvements to the process are ongoing as community college practitioners refine their prioritization processes.

Nevertheless, due to commonalities and the shared core mission of community colleges, the results and analysis presented herein surely offer an opportunity to provide community college leaders with valuable insights and to encourage and improve prioritization work. In the next chapter, the researcher will more directly address the research questions and further discuss best practices, lessons learned, and pitfalls to avoid to improve prioritization efforts at community colleges. Implications for further study will also be discussed.

CHAPTER 5: DISCUSSION, CONCLUSIONS, AND IMPLICATIONS

INTRODUCTION

This chapter will provide community college leaders and practitioners with recommendations to improve existing prioritization practices, as well as offer guidelines for those who have not previously engaged in prioritization work. Discussion and recommendations are presented using the research questions listed in Chapter 1 as a framework. Questions one through four address the state of prioritization work at the community colleges included in this study, while responses to questions five through eight offer recommendations for improving prioritization practices. The chapter will conclude with discussions of the limitations and delimitations of this study, conclusions, future research, and implications.

ADDRESSING THE RESEARCH QUESTIONS

The research questions posed at the beginning of this study included,

1. What are the most common catalysts of program prioritization efforts at community colleges?
2. How successful have program prioritization efforts been at community colleges?
3. What program prioritization models are most effective?
4. What are the outcomes of program prioritization efforts at community colleges?

5. What are some of the program prioritization practices that have not been effective and should be avoided?
6. What are some of the barriers to a successful community college program prioritization effort?
7. What factors are key to the success of program prioritization efforts at community colleges? And,
8. What are some of the best practices in community college program prioritization?

Question 1: Common Catalysts of Prioritization

Catalysts cited included fiscal, environmental, and strategic. Several participants indicated that while the initiation catalyst for their prioritization work was fiscal, such as the threat of a budget crisis, what sustained their prioritization efforts was primarily the promise of data-informed program improvements. Program improvements were realized at the macro level, i.e., a better portfolio of program offerings more aligned with the needs of local employers and university partners, as well as the micro-level through elimination of programs that were no longer viable and did not offer students a credential of value, or significant program redesign to improve quality and program relevance.

Ideally, prioritization work should be driven by strategic efforts to refocus institutional resources on the mission and improve the quality of programs and services to meet the needs of students and other community college stakeholders. Furthermore, according to the findings of Milkovich (2012), prioritization initiatives that are more proactive than reactive tend to be the most effective and successful.

However, one cannot escape fiscal realities or the fact that finances will always be a driver of resource allocation decisions, and thus, will always be an important factor in prioritization decisions. One of the most salient advantages of employing a holistic prioritization approach to making resource allocation decisions is that it drives community college leaders to be more attentive and mindful of those decisions from a college-wide perspective. For example, given limited financial resources, a decision regarding whether to fund a new academic adviser position or a new full-time faculty position should not depend on the political influence of the Vice President of Student Services vs. that of the Vice President of Academic Services. Such decisions should be driven by criteria and data established and gathered as part of the prioritization process.

Question 2: Success of Community College Prioritization Efforts

All interview participants reported that their prioritization efforts had been successful. However, some prioritization efforts were more comprehensive and effective than others. For example, several community colleges represented in this study reported that they conduct a prioritization of all of their academic programs on an annual basis. Others reported only doing prioritization work every three years or occasionally. Some only included a limited number of academic departments, which significantly comprises the ability to make holistic prioritization and resource allocation decisions. Also, none of the community colleges represented had included student services or administrative functions in their prioritization efforts. Nevertheless, all

participants expressed that prioritization at their colleges was valuable enough that they all intended to continue to build and improve upon their prioritization work.

Question 3: Effectiveness of Prioritization Models

Of the prioritization models included in this study, those that were most effective were those that were conducted annually, included all academic disciplines and programs, included valid and reliable data, were not too complex or onerous, and were supported by top leadership. Of course, there were variations among even the most effective prioritization models, and some aspects of any model may work well for one organization and not another. Clearly, the participants in this study who had tried to adopt the Dickeson model of prioritization had found that it was not a good fit for their institutions. While there is no one-size-fits-all model of prioritization, there are factors that are pivotal to ensuring a successful prioritization effort, as well as those that will greatly improve its effectiveness. These factors will be discussed in responses to research questions five through eight.

Question 4: Outcomes of Prioritization Efforts

The most commonly cited outcome of prioritization at the community colleges represented in this study was academic program improvements. While several participants reported eliminating programs as a result of their prioritization work, more often than not, the focus was on redesigning and realigning programs to improve effectiveness, quality, and value to students, employers, and the community. Furthermore, the inclusiveness of the prioritization process and the use of data to

inform prioritization decisions gave participating community college leaders and practitioners confidence that the changes catalyzed by prioritization were the right changes to make.

Question 5: Ineffective Practices

While it is clear that most participants felt that their prioritization initiative was far more positive than negative, interviewees shared several practices that had not worked well for their colleges, as well as barriers to successful prioritization efforts. Ineffective practices included (a) prioritization processes that are too complex and (b) failure to manage prioritization efforts like you would any major change process.

Very complex and/or complicated prioritization processes are ineffective and tend to bog down prioritization work. Several community colleges represented in this study had rather complex processes that compromised the effectiveness of their prioritization efforts. One college had completed the development and data-gathering steps but had never really gotten to the discussion and analysis phase with faculty and other key stakeholders. As a result, the implementation of prioritization outcomes suffered.

Another community college, which had the most complex prioritization process included in this study, was only able to complete the process with a limited number of academic departments. The interviewee expressed a desire to continue the institution's prioritization work as she felt there was a strong need. However, due to the complexity

of their prioritization processes, and the lack of a clear direction, the future of prioritization that college was unclear.

The other ineffective prioritization practice revealed in this study is the failure to recognize prioritization as a major change initiative. It is wise not to underestimate the power of a well-executed prioritization effort to catalyze significant changes by refocusing institutional priorities and redirecting resources. Because prioritization drives change, it will very likely elicit fear and resistance from some faculty and other stakeholders who may be affected. Therefore, community college leaders should take care to manage prioritization as they would any major change initiative.

Question 6: Barriers to Success

Several barriers to successful prioritization efforts also surfaced in this study. The most frequently cited barrier was unavailable and/or a lack of easy access to valid and reliable data aligned with identified prioritization criteria, particularly labor market data and program cost data. Another barrier identified was time constraints to getting prioritization work accomplished.

Question 7: Key Success Factors

There are several key factors that will help ensure a successful prioritization. These should be thought of as readiness factors or prerequisites to launching a prioritization initiative. Key success factors include commitment and access to institutional research services and financial data.

Commitment and support from leadership, including the college President and the Board of Trustees, is extremely important. Community college leaders interested in conducting a prioritization must be committed to supporting the work by allocating sufficient resources, particularly their time and staff time. The President and Board must be committed to supporting prioritization decisions and implementing the indicated changes. If there is no commitment to reallocating resources and/or carrying out needed changes, as revealed through the prioritization process, there is no point in wasting time and other resources, or compromising morale or the credibility of administration and the prioritization process itself.

Institutional research services capable of providing valid and reliable data to inform prioritization decisions are critical. If valid and reliable data are not available or accessible, your prioritization work will lack credibility and the decision-making phase will be compromised.

The availability of financial data is also important. While fiscal matters are not the driving force behind prioritization efforts, resources will always be scarce. Therefore, the cost of community college programs and services is an important factor in any prioritization decision. Davis Jenkins of the Community College Research Center has written several scholarly papers on methods for measuring costs of community college programs and services. One community college represented in this study developed an effective cost-to-education model to support their prioritization of academic programs.

Question 8: Best Practices

There are a substantial number of best practices in community college prioritization that can be drawn from this study. They fall into a number of categories that together create a framework or model of effective and successful prioritization at community colleges. The model includes best practices on (a) when and why to prioritize, (b) managing change, (c) ensuring quality data, (d) manageability, (e) successful implementation, and (f) sustainability.

When and Why to Prioritize

Getting off to a good start when embarking on a prioritization journey is key to its effectiveness and success. Be proactive, strategic, and quality-driven.

1. Don't wait for a financial crisis. Develop and implement a prioritization process as a way to avoid or mitigate a financial crisis before it occurs. Be proactive and strategic.

2. Do it for the right reasons. The most effective and successful prioritization efforts are launched with the objectives of refocusing on the mission, improving the college, and encouraging a culture that values quality and strives for excellence. Prioritization efforts launched for the sole purposes of eliminating programs are ill-fated and missing the mark.

Managing Change Effectively

Prioritization is a major change initiative. There will be early adopters and champions; but there will also be misconceptions, fear, and resistors.

3. Approach and manage prioritization like any other major change initiative. Insights and guidelines on effective change management are readily available. Several notable authorities on change management include Rosabeth Moss Kanter, John P. Kotter, and Simon Sinek.

4. Be open and transparent. Communicate the big picture goal of prioritization, i.e., it helps us be good stewards of the resources entrusted to us. Focus on

the primary objectives, which are data-driven improvements and resource allocations. Some programs or services may be discontinued, but when that happens, those decisions are predicated on data and will be objective.

5. Be inclusive of important stakeholders in the prioritization process, but don't expect that you will always get buy-in.

Ensuring Quality Data

Quality data are critical to successful and effective prioritization initiatives. If the data you need are unavailable or questionable, your prioritization process will not be credible and it will be very difficult to make and act on the decisions based on those data.

6. Carefully select and clearly define prioritization criteria.

7. Carefully identify data to assign value to and measure your selected criteria. Try to use existing metrics, like Voluntary Framework of Accountability data, so that the process is not too onerous.

8. Make sure that the data you select to inform your prioritization decisions are available, valid, and reliable.

9. Using prioritization categories—e.g., deficient, marginal, achieving, valued, benchmark or enhance funding, maintain funding, reduce funding, or eliminate program/service—is more effective than ranking alone.

Manageability

Keep your prioritization model as simple and straightforward as possible; don't make it too complex or complicated. This will help mitigate initiative fatigue, confusion, and frustration.

10. Simplify and streamline prioritization processes whenever possible.

11. When selecting criteria, take care to only include those that are necessary to inform prioritization decisions. Forego the "nice to knows" in favor of the "need to knows."

12. Make sure your prioritization documents are understandable, easy to use, and effective for decision making. They should be clear and concise; use familiar language and terms commonly understood by all audiences; easily digestible by readers; and present data in a clear and concise format.

13. Prioritization outcomes documents should be relatively easy to use, understand, and communicate to others. This is particularly important when the time comes to communicate prioritization decisions.

Successful Implementation

The time and effort put forth to develop a prioritization process, analyze prioritization data, and formulate desired outcomes will be an ironic waste of resources if you fail to implement your prioritization action plan.

14. Commit to following through on actions and changes indicated by your prioritization work. Prioritization efforts can be time-consuming and emotionally charged; if you are not going to implement the needed changes revealed by prioritization, don't waste the resources necessary to conduct a prioritization or get stakeholders worked up for nothing.

15. If prioritization reveals that a program is struggling or weak, bring stakeholders together to consider program improvements or modifications before eliminating it. Collaborative conversations and developing plans to improve programs are some of the most valuable outcomes of prioritization work.

16. Make the changes and allocate the resources necessary to improve struggling programs determined to have high value potential.

17. If a program has no potential to provide students with a pathway to a credential of value, eliminate it. If a service has proven ineffective in supporting student success, stop offering it and try another approach. If an auxiliary function is not self-supporting and draining resources from the core mission, discontinue it. Make the tough decisions when necessary.

Sustainability

The great value of prioritization efforts cannot be fully realized unless prioritization is approached as a framework for continuous quality improvement. Effective prioritization is not a "one and done" prospect.

18. Conduct a prioritization at least every three years, annually is better.

19. Consider aligning or embedding your prioritization work with accreditation standards and/or your strategic planning process.

20. Develop an aligned process to make data-informed, strategic decisions before launching new programs and services.

21. Adjust your prioritization model as it matures. Debrief and brainstorm improvements after each prioritization cycle. Strive for continuous quality improvement.

Figure 2 shows a graphical representation of the key factors to successful prioritization initiatives. The light green boxes depict the readiness factors or those factors that should be in place before considering a prioritization effort. The orange box represents the prioritization catalysts that tend to lead to a successful prioritization effort. The blue boxes show best practices to ensure the most effective and successful prioritization possible.

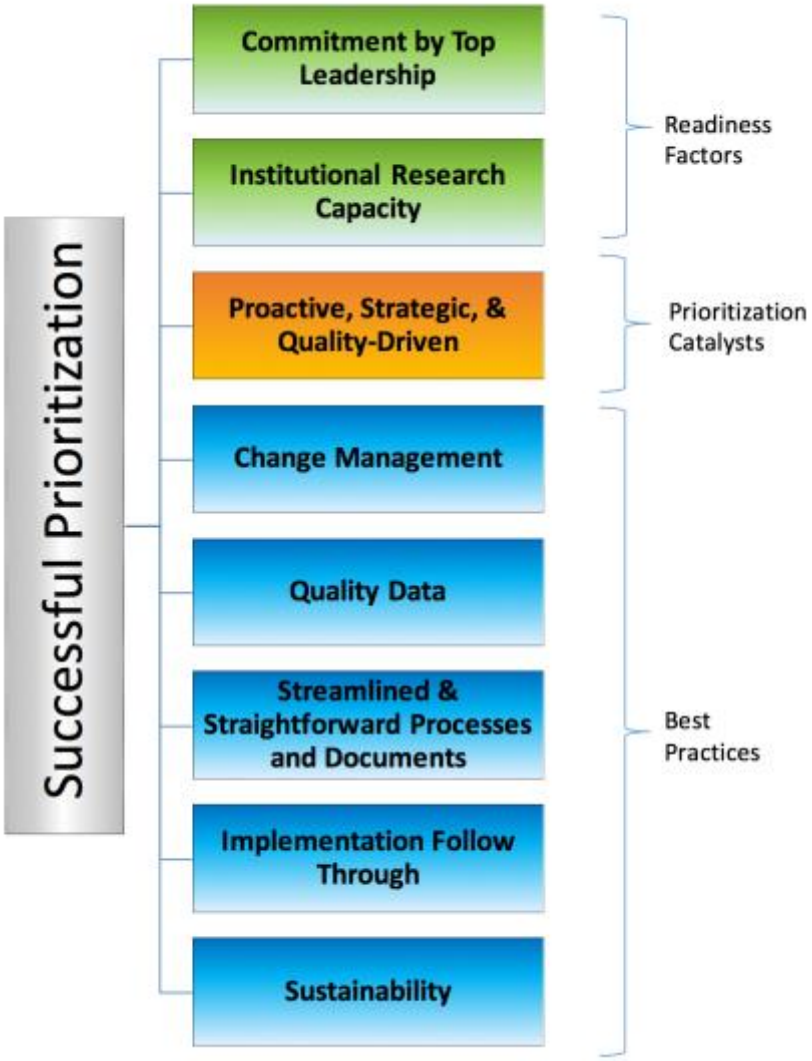

Figure 2. A Model of Key Prioritization Success Factors

The participants of this study provided very valuable insights on how to ensure an effective and successful prioritization effort. It is hoped that sharing these best practices will encourage and improve prioritization efforts at community colleges.

LIMITATIONS AND DELIMITATIONS

Data collection for this study was limited to interviews and prioritization documents from eleven community colleges in one Midwestern state; one participant

did not participate in an interview but provided prioritization documents. The state where all eleven community colleges are located is a decentralized state. That is, each community college in the state is governed by its own publically elected board. There is no state-level governing board with authority over the community colleges in the state. All participants in the study were employed in academic units at their respective community colleges.

Delimitations of this study included the following:

1. All participants had direct knowledge and experience with prioritization practices at a community college.
2. All interview participants were employed at a community college at the time they were interviewed.
3. All community colleges represented in this study had undertaken a systematic program prioritization, ranking, or categorization process within the last five academic years at the time of the study.
4. The prioritization process employed was data-driven.
5. The prioritization effort included a significant unit or units of the organization, e.g., the career education division, all academic programs, or all programs in an academic department.

CONCLUSIONS

In attempts to meet the needs of a myriad of stakeholders, community colleges have pursued programs and services outside of their core mission—i.e., to provide career, workforce, and transfer education opportunities in service to their students, local communities, and employers. In trying to be all things to all people, many community colleges have spread their resources too thin and unwittingly built a culture of mediocrity. Community colleges need to refocus on the core mission and decide what

they are going to be excellent at and direct their scarce resources into those programs and services. Prioritization may be the answer.

The purpose of this research was to evaluate the state of prioritization work at community colleges in one Midwestern state; share best practices, success factors, and pitfalls to avoid; and encourage and improve prioritization efforts. Prior to conducting this study, the researcher's assumption was that very few community colleges were engaged in prioritization work. In fact, there is much more prioritization work taking place than the researcher realized.

Still, there appears to be a significant number of community colleges that are not leveraging the power of data-driven, systematic, objective decision-making through prioritization. Also, there is certainly room for improving the effectiveness of prioritization work that community colleges are engaged in. Two high priority areas that should be targeted to greatly improve prioritization efforts include enhancing and improving institutional research and financial data capacity to support prioritization efforts and expanding the scope of prioritization work. While the number of community colleges engaged in academic program prioritization work is encouraging, the true power of prioritization cannot be realized until prioritization efforts expand to include all academic disciplines, programs, and services; as well as student services, administrative functions, auxiliary services, etc. In order to realize the full benefits of prioritization work, all programs, functions, and services offered and performed at community colleges must be included in these efforts.

FUTURE RESEARCH

To advance the understanding, knowledge, and practice of prioritization work at community colleges, additional research is needed. This study could be replicated to include community colleges beyond the Midwestern state covered by this study. A study of prioritization work at community colleges in a state with a centralized governing structure may yield additional insights. Other areas of needed research include topics such as prioritization data challenges and best practices in institutional research and/or finance to support prioritization work. Finally, more research in needed to better understand prioritization efforts, best practices, and challenges in non-academic services and functions at community colleges.

IMPLICATIONS

It is the hope of the researcher that this study will inform and catalyze improved prioritization practices and outcomes at community colleges. It is also hoped that this study will encourage more community college leaders to embark on a prioritization journey as a key strategy to support and advance the community college mission.

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APPENDIX A: IRB APPROVAL LETTER

FERRIS STATE UNIVERSITY

Institutional Review Board for Human Subjects in Research

Office of Academic Research, 220 Ferris Drive, PHR 308 · Big Rapids, MI 49307

Date: April 7, 2015

To: Sandra Balkema and Leslie Kellogg
From: Dr. Stephanie Thomson, IRB Chair
Re: IRB Application #150205 *(Evaluation of Program Prioritization Efforts and Approaches at Community Colleges)*

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, *"Evaluation of Program Prioritization Efforts and Approaches at Community Colleges"* (#150205) and determined that it meets Federal Regulations *Expedited-category 2G*. This approval has an expiration date of one year from the date of this letter. **As such, you may collect data according to the procedures outlined in your application until April 7, 2016**. Should additional time be needed to conduct your approved study, a request for extension must be submitted to the IRB a month prior to its expiration.

Your protocol has been assigned project number (#150205), which you should refer to in future correspondence involving this same research procedure. Approval mandates that you follow all University policy and procedures, in addition to applicable governmental regulations. Approval applies only to the activities described in the protocol submission; should revisions need to be made, all materials must be approved by the IRB prior to initiation. In addition, the IRB must be made aware of any serious and unexpected and/or unanticipated adverse events as well as complaints and non-compliance issues.

Understand that informed consent is a process beginning with a description of the study and participant rights with assurance of participant understanding, followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document and investigators maintain consent records for a minimum of three years.

As mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) the IRB requires submission of annual reviews during the life of the research project and a Final Report Form upon study completion. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let us know if the IRB can be of any future assistance.

Regards,

S. Thomson

Ferris State University Institutional Review Board
Office of Academic Research, Academic Affairs

APPENDIX B: TEXT OF EMAIL SOLICITING PARTICIPANTS

Dear Colleague,

I am in the Doctorate of Community College Leadership program at Ferris State University. As part of the program, I am conducting research on program prioritization efforts at community colleges. My research objectives include the following:

- Gain insight into program prioritization practices in use at community colleges.
- Identify lessons learned and best practices in community college program prioritization initiatives.

To inform my research, I am conducting interviews with community college leaders with direct knowledge of program prioritization practices at community colleges that have undertaken a systematic program prioritization initiative within the last five years. The interview takes approximately one to one and a half hours and can be conducted in person or via telephone. Consent form and interview questions are sent to interviewees in advance.

If your college has engaged in academic and/or administrative program prioritization within the last five years, I would really appreciate the opportunity to interview you or someone else at your institution who was actively involved. If you or someone you know is willing to participate, please respond to this email or contact me at 269-927-6748.

Thank you,

Leslie Kellogg

APPENDIX C: INFORMED CONSENT

Informed Consent

Project Title

Evaluation of Program Prioritization Efforts and Approaches at Community Colleges

Purpose

I am currently researching the community college program prioritization practices as part of my doctoral work at Ferris State University.

Participation

I am asking you to participate in this study because you have direct knowledge of program prioritization practices. By agreeing to be part of this study, you will be asked to respond to questions about program prioritization on four broad topics, which include background information, models, processes, and recommendations. The interview will take approximately 60 to 90 minutes to complete. With your permission, I will record the interview to ensure that I accurately capture your response. In addition, with your permission, I may need to contact you later with additional follow-up questions.

Potential Risks

There are no known risks associated with this study because the topic is not sensitive.

Anticipated Benefits

Others may benefit from your participation because as operating budgets shrink and stakeholders demand cost-effective and relevant programming, community colleges must apply systematic program prioritization processes to ensure that resources are allocated or reallocated strategically and efficiently. An effective program prioritization framework or model is a powerful tool to help community college leaders decide what programs should be phased out, what programs should be infused with resources, and what new programs should be developed and offered. The work of prioritizing programs has never been more vital to the future of community colleges. Currently, the most widely-used model focuses primarily on universities and university priorities. Community colleges have different program needs and drivers. Consequently, a process model that better aligns with the unique mission and characteristics of community colleges is needed. It is hoped that this research project will identify those unique community college elements necessary to better align program prioritization with community college needs.

Confidentiality

Records of your participation in this research study will be maintained and kept confidential as required by federal regulations. Your identity will not be revealed on any report, publication, or at scientific meetings.

In order to keep your information safe, the researcher will remove all identifying information of the participant and the organization represented by the participant. The information you provide will be stored in a locked filing cabinet in the researcher's home and the researcher will retain the information for three years. At the conclusion of this time period, the researcher will dispose of your information by shredding all interview notes and documentation. The information will not be made available to other researchers for other studies following the completion of this research study.

Participant Rights

You are free to end the interview at any time. If you decide to end the interview before it is finished, there will be no harm to you. If you decide to withdraw from the study, your responses will not be included.

Contact Information

The main researcher conducting this study is Leslie Kellogg, a doctoral student at Ferris State University. Please ask any questions you have now. If you have questions later, you may contact her advisor, Dr. Sandra Balkema at 231-591-5631 or balkemas@ferris.edu.

If you have any questions or concerns about your rights as a subject in this study, please contact:
Ferris State University Institutional Review Board (IRB) for Human Participants
220 Ferris Drive, PHR 308, Big Rapids, MI 49307
(231) 591-2553 or IRB@ferris.edu

Signatures

Research Subject: I understand the information printed on this form. I have discussed this study, its risks, potential benefits and my other alternatives. My questions so far have been answered. I understand that if I have more questions or concerns about the study or my participation as a research subject, I may contact one of the people listed above in the "*Contact Information*" section. I understand that I will receive a copy of this form at the time I sign it. I understand that if my ability to consent for myself changes, either my legal representative or I may be asked to re-consent prior to my continued participation.

For in person interviews
Signature of Subject: _____

Printed Name: _____

Date of Signature: _____

For Phone Interviews

Principal Investigator (or Designee): I have given this research subject (or his/her legally authorized representative, if applicable) information about this study that I believe is accurate and complete. The subject has indicated that he or she understands the nature of the study and the risks and benefits of participating.

Printed Name: _____

Title: _____

Signature: _____

Date of Signature: _____

APPENDIX D: INTERVIEW QUESTIONS

Program Prioritization Interview Questions

A. Topic: Background Information on the Interviewee and the Prioritization Process

1. **What is your primary role at the College?**

2. **What role did you play in the program prioritization process?**

3. **Where are you at in the process of program prioritization?**

    - **Completed**
    - **Work in progress**
    - **Exploring**

If you have completed a prioritization process, please answer questions 4 and 5.

4. **When did you conclude the program prioritization process?**

5. **How long did the process take?**

6. **What catalyzed your program prioritization effort?**

    - **Fiscal (budget crisis, cuts, or threats)**
    - **Environmental (new leadership, board driven, legislative pressures, increased competition, accreditation finding, changes in student demographics)**
    - **Strategic (quality improvements, enrollment increases, improved student outcomes, proactive responsiveness to external forces)**
    - **Other (Please describe.): _____**

7. **Did you include academic programs, student services, and/or administrative functions in your prioritization efforts?**

B. Topic: Prioritization Model Used

8. **What stakeholder groups were represented in the program prioritization process?**

    ☐ **Students**
    ☐ **Faculty – Full Time**
    ☐ **Faculty – Part Time**
    ☐ **Administrators – Cabinet Level**
    ☐ **Administrators – Not Cabinet Level**
    ☐ **Student Services Staff Members**
    ☐ **Other Staff Members (Identify department and title.): _____**
    ☐ **Board of Trustees Members**
    ☐ **Program Advisory Committee Members**
    ☐ **Employers or Potential Employers of Graduates**
    ☐ **Other (Please describe.): _____**

9. **Are you familiar with the program prioritization model developed by Robert Dickeson?**

10. **Did you follow the Robert Dickeson model?**

If you did follow the Dickeson model or are familiar with it, please answer questions 11 and 12.

11. **In your opinion, what are the strengths and weaknesses of the Dickeson model in terms of its alignment with community college structure and culture?**

12. **Did you modify the Dickeson model to align better with your institution? If so, how?**

13. **Did you use data to inform your program prioritization rankings and/or decisions?**

14. **What factors were considered? (*Dickeson criterion)**

- ☐ **History, Development, and Expectations of Program* (pp. 71-72)**
- ☐ **External Demand for the Program* (pp. 72-74)**
  - ☐ **Program Enrollment**
  - ☐ **Course Enrollment**
  - ☐ **Labor Market Demand for Program Graduates**
  - ☐ **Community Need for Program**
  - ☐ **Popularity of Program**
- ☐ **Internal Demand for the Program* (pp. 74-75) E.g., Support Course Enrollment**
- ☐ **Quality of Program Inputs and Processes* (pp. 75-78) E.g., Faculty and Staff, % of Instruction Delivered by FT Faculty, Students, Curriculum, Adaptability to Technology, Equipment, Facilities**
- ☐ **Quality of Program Outputs* (pp. 78-79)**
  - ☐ **Employment and/or Transfer Rate of Graduates**
  - ☐ **Third-party Assessments**
  - ☐ **Satisfaction Surveys (Students, Employers, Universities)**
  - ☐ **Assessment of Student Learning Measures**
  - ☐ **Faculty Performance**
  - ☐ **Reputation in Community and/or Beyond**
- ☐ **Size, Scope, and Productivity of the Program* (pp. 80-81)**
  - ☐ **Number of Majors/Clients/Customers Served**
  - ☐ **Number of Awards Conferred**
  - ☐ **Graduation/Completion Rate**
  - ☐ **Number of Faculty and Staff Assigned**
  - ☐ **Number of Contact/Billing Hours Generated**
  - ☐ **Services Rendered**
- ☐ **Revenue and Other Resources Generated by the Program* (pp. 81-83)**
- ☐ **Costs and Expenses Associated with the Program* (pp. 83-84)**
  - ☐ **Cost of Program to Students**
  - ☐ **Cost of Program to College**
- ☐ **Impact, Justification, and Overall Essentiality of the Program* (pp. 84-85)**
- ☐ **Opportunity Analysis of the Program* (pp. 85-86) E.g., Growth Potential**
- ☐ **Other (Please describe.): _____**

C. Topic: Evaluation of Prioritization Process Used

15. **What do you think went well with your prioritization effort?**

16. What resistance or obstacles did you encounter?

17. Are you measuring prioritization outcomes? If so, how?

18. What were some of the most valuable outcomes?

19. Were there any negative consequences for the College?

20. Do you have a plan or strategy for continuing or sustaining your prioritization efforts?

D. Topic: Recommendations for Improving the Prioritization Process

21. Are there factors that you believe should be considered when making program prioritization decision, but were not? Please explain your answer.

22. In your opinion, should all factors considered when prioritizing academic programs be weighted equally?

23. If not, what factor or factors do you believe should be weighted more heavily (are more important) than others?

- ☐ History, Development, and Expectations of Program* (pp. 71-72)
- ☐ External Demand for the Program* (pp. 72-74)
  - ☐ Program Enrollment
  - ☐ Course Enrollment
  - ☐ Labor Market Demand for Program Graduates
  - ☐ Community Need for Program
  - ☐ Popularity of Program
- ☐ Internal Demand for the Program* (pp. 74-75) E.g., Support Course Enrollment
- ☐ Quality of Program Inputs and Processes* (pp. 75-78) E.g., Faculty and Staff, % of Instruction Delivered by FT Faculty, Students, Curriculum, Adaptability to Technology, Equipment, Facilities
- ☐ Quality of Program Outputs* (pp. 78-79)
  - ☐ Employment and/or Transfer Rate of Graduates
  - ☐ Third-party Assessments
  - ☐ Satisfaction Surveys (Students, Employers, Universities)
  - ☐ Assessment of Student Learning Measures
  - ☐ Faculty Performance
  - ☐ Reputation in Community and/or Beyond
- ☐ Size, Scope, and Productivity of the Program* (pp. 80-81)
  - ☐ Number of Majors/Clients/Customers Served
  - ☐ Number of Awards Conferred
  - ☐ Graduation/Completion Rate
  - ☐ Number of Faculty and Staff Assigned
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- ☐ Revenue and Other Resources Generated by the Program* (pp. 81-83)
- ☐ Costs and Expenses Associated with the Program* (pp. 83-84)
  - ☐ Cost of Program to Students
  - ☐ Cost of Program to College
- ☐ Impact, Justification, and Overall Essentiality of the Program* (pp. 84-85)
- ☐ Opportunity Analysis of the Program* (pp. 85-86) E.g., Growth Potential

☐ **Other (Please describe.): _____**

24. **Thinking about the people who participated in the program prioritization process at your College, do you believe all important groups (e.g., students, faculty, staff, administrators, trustees, advisory committee members, employers) were represented in the process?**

25. **If not, what group or groups do you believe should have been represented in the process, but was/were not?**

    ☐ **Students**
    ☐ **Faculty – Full Time**
    ☐ **Faculty – Part Time**
    ☐ **Administrators – Cabinet Level**
    ☐ **Administrators – Not Cabinet Level**
    ☐ **Student Services Staff Members**
    ☐ **Other Staff Members (Identify department and title.): _____**
    ☐ **Board of Trustees Members**
    ☐ **Program Advisory Committee Members**
    ☐ **Employers or Potential Employers of Graduates**
    ☐ **Other (Please describe.): _____**

26. **Do you think the prioritization process and/or implementation could be improved upon in any other way not already discussed? If so, how?**