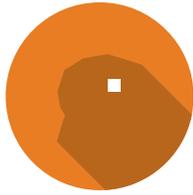


A BOTTOM-UP STUDY OF TOP-DOWN ASSESSMENT: Community college administrator perceptions of external accountability assessments

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EXECUTIVE SUMMARY

Assessment, accountability, and transparency have become a greater focus than ever in higher education. Community colleges are not exempt from these requirements despite often being overlooked in the creation of state and national assessment instruments. We designed and distributed the Perceptions of Community College Assessment (PCCA) survey, a national survey of the perceptions of community college employees (n=198) who administer or assist in the administration of state and federal community college assessments. Respondents endorsed low confidence in the accuracy of existing assessment measures used at the state and federal levels. Respondents believed much of the work of community colleges and the majority of their students are not included in existing assessments. They offered a number of suggestions of new items to be included in the assessment of community colleges. Based on our findings, we recommend that existing assessment measures, specifically the College Scorecard in its current form for community colleges be discontinued. Further, we recommend creating a measure specific to the community college that incorporates their unique vision, mission, and values to accurately assess the work community colleges complete. We further recommend expanding the classifications of community colleges to reflect the realities and complexities of modern day community colleges that offer bachelor's degrees and focus on regional needs.

INTRODUCTION

Community colleges have served a vital role in the U.S. system of education, providing access to post-secondary education for millions of students each year for over a century (Cohen & Braun, 2008). During the Fall of 2016, 6.1 million students (36% of undergraduate students) were enrolled in community colleges (National Center for Education Statistics [NCES], 2018). Enrollment in a community college often represents the best or only option for students with financial challenges, students in rural areas, and those with specific career goals and needs that would not be addressed in a traditional four-year university program (Bahr et al., 2017; Ezarik, 2017; Ma & Baum, 2016; Nuñez & Oliva, M., 2009). Nevertheless, this important work is often overshadowed by criticisms of community colleges (Cohen & Braun, 2008). Many of these critiques are offered after applying university-based assessments to community colleges which may not yield accurate findings (Bradley, 2014; Kelly-Kleese, 2004; Ocean, Tigertail, Keller, & Woods, 2018). Regardless, the pressure on community colleges to prove their value in the larger system of higher education at the state and federal levels continues to intensify (Ewell, 2011; Jenkins & Kerrigan, 2013; Johnson, 2013). While there have been calls for more relevant and meaningful accountability measures for community colleges (Bahr, 2013; Bradley, 2011), there has been – to date – no coordinated effort to implement such measures nationally. To contextualize our research, we will briefly review the assessment of community colleges at the federal and state levels in addition to recommendations in the research literature on community college assessment. A concise overview of our theoretical frame is presented below, followed by our research questions.

LITERATURE REVIEW

The Higher Education Act of 1965, as amended (U.S. Department of Education, 2008), requires all post-secondary institutions who engage in the federal student financial aid programs to report data on their students, employees, and finances annually (NCES, n.d.-a). This data is made publicly available through the Integrated Postsecondary Education Data System (IPEDS) as well as the College Scorecard.

IPEDS is primarily used by education researchers. The database is frequently used to evaluate institutional success. However, IPEDS is geared towards university accountability and employs paradigms traditionally used for university programs. For instance, for a community college, “normal time to completion” is defined as “2 years (4 semesters or trimesters, or 6 quarters, excluding summer terms) for an associate’s degree” (NCES, n.d.-b, Normal Time and Calculation of 150% of Normal Time 1, para. 1). Additionally, institutional graduation rates are based on cohorts of first-time, full-time students. Inclusion in a specific cohort remains static despite the dynamic nature of individual students’ program completion, especially at community colleges. “Students who switch to part-time status or to another program are not given extra time to complete, nor are they removed from the cohort.” (NCES, n.d.-b, Cohort, 14 para. 2).

Regardless of years of well-grounded criticism of this measure of graduation rate, it continues to remain the same, tracking first-time, full-time students who begin and complete their educations at a singular institution within *normal time*. However, some progress has been made more broadly within the IPEDS database (Lederman, 2017). The graduation rates for additional cohorts that track part-time first-time, full-time non-first time, and part-time non-first-time are included in the IPEDS outcome measures section (IPEDS, 2016).

The College Scorecard is intended to assist potential students and their families in making informed decisions regarding institution selection (“College Scorecard Data,” 2018). The former U.S. Secretary of Education, John B. King Jr., described it as, “...a next-generation tool that helps provide access to the information needed to make the best possible choice about college” (U.S. Department of Education, 2016, para. 3). The College Scorecard reports graduation rates, SAT/ACT scores, student loan default rates, and other items, pulling data from national databases including IPEDS (Executive Office of the President of the United States, 2017). However, the College Scorecard appears, again, to be based on a university model rather than a community college or technical college model. For instance, the College Scorecard publicizes the graduation rate from IPEDS. Because these data are based on the tracking of a first-time in college, full-time student cohort for traditional time periods (up to 200% completion time), which represents a “small minority of the total students enrolled” at community colleges (Executive Office of the President of the United States, 2017, p. 20), they may not be creating an informed public. There is no evidence to suggest that the vision of the community college has been incorporated in any meaningful sense in the data that are made available to the public through the College Scorecard. Therefore, at least 6.1 million community college students do not have access to quality institutional data, but truly all potential post-secondary students are unable to access quality assessments of the work and success of community colleges.

Community colleges are also assessed at the state level, in part due to state funding and accountability for expenditures. Generally, public accountability critics find fault with applying private, consumer or market-based assessments to public services without removing the public bureaucracy and ignoring the product of a public good (Rouse & Smith, 1999). Regardless, 27 states have passed legislation to base at least a portion of community college funding on performance (National Conference of State Legislatures, 2015). Performance-based funding measures can vary from state to state but commonly include course completion, retention, and credential completion. Performance-based funding for community colleges has been criticized for the lack of evidence of its efficacy and for its potential to disadvantage community colleges who serve the populations with the greatest needs (Bailey, Jaggars, & Jenkins, 2015; Braxton et al., 2014; McKinney & Serra Hagedorn, 2017; National Center for Public Policy and Higher Education, 2011). Performance-based measures also favor easily accessed and quantifiable data over the more accurate and laborious intricacies of a complex and subjective reality (Anderson, 2009).

Most commonly, the research and assessments conducted on community colleges are based on a four-year paradigm. Technical and vocational programs at the community college ironically may be the best fit for these assessments because they most closely resemble university standards of admittance and attendance. These programs may have application deadlines, screen applicants (e.g. criminal background check), require completion of prerequisite courses, conduct a selective admission's process (e.g. applicants ranked by grade point average), mandate attendance at a student orientation, and follow a cohort model of attendance ("Limited Access Programs", n.d.; "Limited Enrollment Programs", n.d.). However, community colleges serve an overwhelming majority of open-door admission students. Therefore, the most common markers of success (graduation and retention rates within a traditional four-year time frame) are likely inaccurate (Polinsky, 2002–2003). Moore & Shulock, (2009) have advocated for the inclusion of incremental outcomes (e.g., completion of remedial education, year-to-year retention) in addition to ultimate outcomes (e.g., completion rates) in the evaluation process. Some states have appeared to listen to these critiques by incorporating these milestone completions rather than solely focusing on ultimate outcomes, like graduation (National Conference of State Legislatures, 2015).

However, critiques remain. Bradley (2014) documents the frustration of community college leaders who are skeptical of performance ratings that do not take into account the unique and varied geographic and mission-related identities of community colleges. Commonly in reports from IPEDS data, community colleges are treated as a mostly homogenous group classified by sector of institution specifically: public 2-year, private not-for-profit 2-year, and private for profit 2-year (McFarland et al., 2018). These are very broad classifications using outdated descriptors as the majority of community college students do not complete in two years and 19 states allow community colleges to confer baccalaureate degrees (Povich, 2018). Carnegie Classifications, which are also included in IPEDS but appear to be less frequently utilized, are more specific for community colleges. There are approximately 15 different institution classifications. Institutions are first classified by highest degree offered (Baccalaureate/Associate's Colleges: Mixed Baccalaureate/Associate's Colleges; Baccalaureate/Associate's Colleges: Associate's Dominant; or Associate's Colleges). If an institution is classified as an Associate's College, they are further classified by discipline focus (high transfer; high career and technical; mixed transfer/career and technical; and special focus 2-year) and dominant student type (traditional, non-traditional, and mixed) (The Carnegie Classification of Institutions of Higher Education, 2017). The Baccalaureate/Associate's Colleges is an important new classification for community colleges who offer Bachelor's degrees but still primarily serve as an open door admissions community college. In August 2017, a little less than one third of all Title IV institutions (those required to report information to IPEDS) were classified as 2-year institutions ("NCES Handbook," 2017). While this is a large sector of the system of higher education, it does not reflect the totality of community colleges. It is estimated that about 90 community colleges, who could be classified as Baccalaureate/Associate's Colleges: Associate's Dominant, are being classified as 4-year institutions potentially skewing 4-year data and being ignored in the 2-year data (Povich, 2018).

Regardless, given the significant number of community colleges and the changes in their degree offerings, it seems plausible and possible and even essential, that a new, updated classification (and assessment measures) based on the specific and unique characteristics of these institutions be established. Unfortunately, to date, community college measures continue to reflect the university framework overall. As Ewell (2011) has stated, "Community colleges are among the most distinctive types of institutions in American post-secondary education. Largely as a result, they are ill-served by the kinds of performance measures that are typically used in determining institutional effectiveness" (p. 27). There have been published reports and calls for changes to the

2-year institution classification system (Bahr, 2013; Phipps, Shedd & Merisotis, 2001; Merisotis & Shedd, 2003; Goan & Cunningham, 2007). Some of those calls have been heeded and changes have ensued. But, it is clear that as changes in higher education abound, it is imperative that the classification and assessment measures change and adapt as well, towards the goal of creating updated and equitable frameworks for research, funding, policies and assessment (Merisotis & Shedd, 2003).

Within the education community generally, there has – in recent years – been growing interest in allowing education agencies to implement locally-determined assessment and program evaluation protocols. For example, for educators at elementary and secondary school levels, federal guidelines under the new Every Student Succeeds Act (U. S. Department of Education, 2016a) have facilitated greater state and local control over assessment and accountability decisions (Stosich & Bae, 2018; Shepard, Penuel, & Davidson, 2017). The assumption is that local stakeholders possess the most relevant insights into the communities they represent and therefore are in the best position to assess how education systems can serve those communities most effectively (Brookhart, 2005; Gagnon, 2016). There have been similar calls for locally-designed assessments for community colleges (Schuyler, 1997) and some states have allowed for local metrics in accountability assessments (National Conference of State Legislatures, 2015). However, to date, there has not been a nationwide effort to implement such locally-relevant accountability measures.

When individuals outside of the community college community determine the assessment metrics and dominate the literature that informs policy and practice, the unique and important perceptions of community college insiders are omitted from the dialogue—at a loss to everyone (Kelly-Kleese, 2004; Ocean & Hirschi, 2016; Prager, 2003; Safarik & Getskow, 1997). Additionally, according to Boyd (2011), there should be a balance between the needs of the market and the needs of the community. It is important to remember that the community college was founded as the “people’s college” over 100 years ago (Boyd, 2011). In an effort to provide an informed critique of current perceptions – and misperceptions – related to community college accountability, this study represents an investigation of community college administrators’ perceptions of the accountability assessments in current use.

Theoretical Frame

Critical theory guided our research. Specifically, we modified critical theory models in the areas of public accountability and the educational system (Anderson, 2009; Epstein, 1993; Rouse & Smith, 1999). These frames focus on the power differential that exists between those who decide what will be assessed and those who are held accountable for said assessments. Community college leaders appear to have little, if any, impact on determining the assessments used to hold them accountable. Critical theory, therefore, allowed us to investigate these overlooked perspectives. The theory informed both our survey creation and data analysis.

Unlike the current top down imposed assessments, Anderson (2009) argues that accountability is most productive when it is a “collaborative discourse.” (p. 335). One goal of this research is to further the collaborative discourse about community college assessment.

RESEARCH QUESTIONS

1. What are community college administrator perceptions of accountability assessments for community colleges?
2. What are community college administrator perceptions of using the same assessment measures for community colleges that are also used for universities?

3. Ideally, how do community college administrators believe community colleges should be assessed?
4. Which institutional and environmental factors are correlated with community college administrator beliefs about assessment?

METHODS

In order to comprehensively answer our research questions, we conducted a cross-sectional survey. We sought participation from *in the field* experts, community college employees who conduct research and assessment at their community colleges for external parties. We wanted both to gather quantifiable perceptions of existing measures, to explore the reasons for the rankings, and to recommend innovative solutions. Therefore, our survey consisted of both open-ended and close-ended prompts. To encourage honest feedback on commonly employed assessment measures without fear of retribution for negative perceptions, the Perceptions of Community College Assessment (PCCA) survey was conducted in an anonymous online format. Within this section, we discuss the procedures we followed, the survey we developed, our quantitative and qualitative analysis, the participants and their engagement in the research, and the trustworthiness and limitations of the research.

Procedure

In order to create a comprehensive national listing of active, public community colleges, we used the Integrated Postsecondary Education Data System (IPEDS) database. We searched for “Associate’s”, “public”, and “2-year” on IPEDS to compile a list of community colleges in each of the 50 states and the U.S. territories. Institutions that met all three criteria were included in our research. Educational institutions that did not meet all of these criteria (Associate’s, public, and 2-year), were excluded. This process yielded 1,039 institutions.

Next, we searched each of the identified institutions’ websites for “research,” “institutional research,” and/or “institutional effectiveness” to find the contact information for the Director of the Institutional Research Department (or equivalent). If these searches did not yield an individual to contact, we then searched employee directories, catalogs, and organizational charts. We specifically sought out Institutional Research Directors; however, since not all colleges have a person designated exclusively to this activity, we intentionally kept our inclusion criteria broad. Our goal was to reach a community college employee who was knowledgeable about institutional assessment and federal educational reporting requirements. We are using the term *administrator* broadly to include any individual who administers or assists in the administration of assessment.

After we had compiled a comprehensive list, we sent personalized, individual emails which included a recruitment statement and a link to the informed consent. If a participant selected the “I consent to participate and begin the survey” option at the end of the informed consent statement, the PCCA survey opened in a new window and the participant could begin to complete it. In all, it appeared we successfully sent 780 emails during August and September 2017. The most common reasons that impeded recruitment from the total 1,039 identified institutions were: district level assessment rather than institutional, the inadvertent inclusion of public universities who confer Associate’s degrees, and out of date community college websites. Due to hurricane impacts in many areas of the United States during survey administration, we extended the length of time the survey was open. A mass, generic reminder email with the survey link was sent in the beginning of November 2017 and the survey was closed at the end of November 2017. No compensation or incentives were offered for participation.

Survey

We developed PCCA survey items for this study by drawing on existing federal accountability measures, federal policy, state performance-based funding measures, and the literature on community college assessment. The survey included three major sections: (a) institutional demographics, (b) rankings of existing assessment metrics, and (c) open-ended questions. Prior to publishing the survey, we requested feedback from Directors and Coordinators of Institutional Research and Assessment at community colleges, state colleges and universities, community college faculty, and accreditation administrators. We modified the survey based on the feedback and then piloted it, reviewing the responses after 15 surveys were completed. A formatting error was identified and corrected before the survey was then widely disseminated.

In the final version of the PCCA survey, participants were first asked to provide basic institutional information without identifying individual institutions. These demographic items concerned regional accreditation board, student population, bachelor's degree offerings, and housing options. Second, participants were asked to rank the accuracy of existing assessment criteria in judging the success of a community college from 0-100 (0 – not accurate at all; 50 – moderately accurate; 100 – extremely accurate). As described above, these criteria were compiled from accountability measures currently in use, primarily the College Scorecard and state performance-based funding measures. In all, the survey includes 11 criteria from the College Scorecard and 10 criteria from performance-based measures. Some survey items reflect both sources, as several criteria are included in both lists. The following items were included:

- Individual course completion
- Milestone completion (e.g. 15 credits, 30 Ocredits)
- Retention rate (students returning after 1st year)
- Program completion rate
- Graduation rate
- Transfer rate
- Salary after attending
- Percentage of students earning more than the average high school graduate
- Employment rate
- Typical monthly student loan payment
- Typical total debt for borrowers who graduate
- Student loan default rate
- Average annual cost of attendance
- Most popular programs
- Student body profile (socioeconomic data)
- Student body profile (race/ethnicity data)
- SAT/ACT scores

The criteria were broken into three groups, primarily to provide a visual break and at the end of each of the three groups a comments box was included. Lastly, participants were asked four open-ended questions to attempt to gather more information on their perceptions. For instance, participants were asked, “If you were to create an accurate accountability assessment tool for your community college, what would it include?” Participants were then asked to click a “Submit” feature to complete their participation and submit their responses.

Analysis

For the quantitative analysis of survey data, descriptive statistics were compiled for the demographic items as well as for each of the 17 rating-scale (“slider”) items. In addition, analyses of variance were conducted to reveal any significant differences in ratings by accreditation region, by total enrollment, by housing (offered / not offered), and by degree granting status (bachelor’s degree / no bachelor’s degree).

We followed Braun and Clarke’s (2006) six phases of iterative thematic analysis to analyze the qualitative data. First, we familiarized ourselves with the data. This included multiple reads of the raw data. To facilitate this, tables were created for each of the open-ended prompts including the comment boxes and questions. Second, we created a code book, based on the data, literature, and critical theory, consisting of 43 possible codes. The team coded the data in Dedoose individually, reviewing one another’s work and discussing any discrepancies in the analysis. Coding the data organizes it into retrievable “chunks” (Spencer, Ritchie, & O’Connor, 2003, p. 203), which we refer to as excerpts. Once our data were coded, we began the third phase of analysis: identifying themes. Initial themes were generated from reviewing exported coded data, code frequency, notes taken during analysis, and team discussions. Fourth, we reviewed our themes. We wanted to ensure the themes were not veering from the data. Therefore, we created matrices by participant, code, and prompt to revisit the raw data and assess the accuracy of the themes (Miles & Huberman, 1994). We adjusted initial themes as needed and then moved into the fifth phase of analysis: formally defining and naming themes. To complete the sixth and final phase, we generated this report.

Respondents and Survey Completion

A total of 198 surveys were submitted online by respondents who followed the Qualtrics link, provided consent, and eventually submitted a survey. Because not all of the surveys were completed in their entirety, the actual numbers represented in different analyses vary based on the number of valid responses available for each specific analysis. For example, there are 178 valid responses to the item requesting the respondent’s accreditation region and 177 valid responses for the items related to student housing. The 17 rating scale items discussed below yielded valid response rates ranging from 115 to 157.

The overall return rate was 25.4% for the full set of 198 submitted surveys, based upon a total of 780 e-mail requests. However, since not all surveys were completed in their entirety, a more legitimate approach would be to examine return rates based upon actual items completed. On this basis, the average return rate for the demographic portions of the survey was 22.8% and the average return rate for the rating scale items was 18.6%. Both of these statistics are within the typical range of return rates for external online surveys (Nulty, 2008; Shih & Fan, 2009).

Of the submitted 198 surveys, 106 included feedback for at least one of the open-ended prompts. On average, 7.65 codes were assigned per participant, with a range of 1 to 18 and a median of 7 codes per participant. We employed both double coding (more than one code applied to an excerpt) and embedded coding (smaller quote within a larger excerpt) (Saldaña, 2013) which lead to the creation of 1,045 excerpts using our codebook. Excerpts per participant ranged from 1 to 37, averaging 9.85 excerpts and a median of 8 excerpts per participant. In other words, some respondents spoke equally across topics, while others repeatedly addressed one or a small number of topics. To further assure transparency in this report, each of the quotes documenting participant views includes the participant number ranging from 1 to 198 and is listed as (P#).

The qualitative data include some comments that may help to explain why 4% of respondents, after completing the demographic items, did not continue with the rating scale items on the

survey. The relevant comments suggest that some respondents had difficulty interpreting the basic premise of the overall question, particularly the use of terms like “predictive” and “accountability” in the prompt. On the survey, the prompt is stated this way: “The following lists represent criteria currently used for accountability assessment of community colleges. Using the sliders, indicate your perception of how accurately each criterion serves as a predictive measure in institutional accountability assessment. Please assume the data originates from the most accurate reporting agency possible.” In a narrative comment, one respondent asked, “What do you mean by predictive measure? Predictive of what?” (P15) and another stated, “I am not sure what a measure of accountability might be. The measures listed here ... seem to be measures of institutional effectiveness” (P59). Within the entire data set, there were a number of additional narrative responses echoing similar interpretation issues with terminology used in the survey.

In addition to the misunderstandings described above, some respondents suggested that the items themselves are not relevant within particular community college settings. For example, one respondent stated, “We do not currently do any predictive measurement. We use the items listed above as part of our assessment process, but we are not yet doing any predictive modeling” (P146). Other comments reflected various difficulties in interpreting the survey prompts in a way that would facilitate valid ratings, for example, “Re: individual course completion rates ... it depends on which individual courses. Gateway courses? Yes. Physical education? Not so much” (P177). Another respondent asked, “Where is the data coming from? Could be terrible or excellent depending on response rate,” (P19) suggesting that questions about the data set itself preclude a valid assessment of how those data might be used. Examples such as these, though representing a minority of respondents, indicate various types of misinterpretation and/or misunderstanding that may have occurred during survey completion. These response trends could also be attributable to a general conclusion that existing accountability metrics are ill-suited for community college assessment (Bahr, 2013; Bradley, 2014; Ewell, 2011; Johnson, 2013). Any of these factors could account, in part, for the failure of a subset of respondents (again, approximately 4%) to complete the rating scale items after completing the demographic sections of the survey.

Of the six accreditation regions, the largest number of submitted and valid surveys came from the North Central Association of Colleges and Schools, The Higher Learning Commission (N = 54) and the Southern Association of Colleges and Schools, Commission on Colleges (N = 53). Taken together, these two regions account for 60% of the total responses. The least number of submitted and valid surveys came from the New England Association of Schools and Colleges, Commission on Institutions of Higher Education (N = 8), comprising 5% of the total. About half (48%) of the submitted and valid surveys represent community colleges with total enrollments between 2,000 and 9,999 and another 24% represent colleges with total enrollments greater than 15,000. Of the total survey pool, most community colleges (84%) do not offer bachelor’s degrees and most (81%) do not provide student housing. The tables below depict the total numbers of respondents in groups based upon region, enrollment, bachelor’s degree status, and housing availability. Again, these demographic statistics represent totals based upon the numbers of valid cases.

Trustworthiness

From the inception of our research questions to our final report, we worked as a team and requested feedback from knowledgeable individuals to ensure the trustworthiness of our findings. To create our survey, we consulted with directors and coordinators of institutional research and assessment at community colleges, state colleges, and state universities, community college faculty, and accreditation administrators. These individuals provided feedback to strengthen our survey

Region	n	% of total
North Central	54	30
Southern	53	30
Western	31	17
Middle States	20	11
Northwest	12	7
New England	8	5

Total Enrollment	n	% of total
500 – 1,999	21	12
2,000 – 4,999	46	26
5,000 – 9,999	40	22
10,000 – 15,000	29	16
More than 15,000	43	24

Offer bachelor's degrees?	n	% of total
Yes	25	14
No	154	86

Offer student housing?	n	% of total
Yes	33	19
No	144	81

and to assist us in editing bias out of our instrument. We also took a team approach to analysis of the data, meeting together regularly to discuss and avoid one perspective skewing the results. Additionally, we consistently revisited the raw data to ensure we accurately represented the participants' perspectives (Spencer, Ritchie, & O'Connor, 2003). We also sent a first draft of our report for feedback to directors of institutional research and assessment at community colleges and state colleges, accreditation administrators, and self-identified participants. Consulting with individuals outside of the research but with their own expertise allowed for multiple viewpoints to be considered from the inception of the research to the conclusion (Fernald & Duclos, 2005). Based on their feedback, we made minor revisions to our final report to ensure clarity and accuracy of our findings.

Limitations

However, as with all research, there are limitations to this study. In developing the participant list, we were limited by the results of the searches we conducted. An internet search of the IPEDS system, using the search terms discussed above, provided significant results. Yet, it is possible an additional term may have yielded additional results. We were also limited by the availability and accuracy of the contact information of likely participants on the institution's website. Institutional websites may not be updated in a timely way and personnel changes might have yielded inaccurate email contact information for participants. Additionally, email requests for participation may have been routed to spam folders and not delivered to the email account of the potential participant. Potential participants, who did receive the recruitment emails, may not have had the time or inclination to complete the survey. Others may have found the topic too politically charged.

It is clear from the above discussion that there was some misunderstanding of terms in some of the questions that solicited qualitative responses. A second iteration of this survey could contain a glossary or more clearly defined definitions of terms. However, these issues speak to the very problem we are studying—the lack of a consistent, understandable way to measure accountability at the community college.

FINDINGS

Our findings are broadly categorized into perceptions of existing measures and proposed solutions to identified inadequacies with the existing metrics. We detail themes and sub-themes with quantitative and qualitative evidence to support the findings documented in this section.

Perceptions of Existing Measures

Overall, respondents did not endorse much faith in the existing measures. First, we will detail respondents' rankings of existing measures from the College Scorecard, state performance measures, and metrics advocated within the existing literature. Simultaneously we will include quotes from respondents to contextualize the numeric rankings. Next, we will explain how the respondents believe the existing measures are not assessing the mission of the community college.

Ranking existing measures.

Within the survey, respondents were asked to rate a series of 17 criteria currently used to assess community colleges on their accuracy and usefulness as predictive measures for institutional accountability at community colleges (on a scale from 0 to 100). The most highly rated item was *program completion rate* (70.2), followed by *retention rate* (64.7), *milestone completion* (64.1), *graduation rate* (63.0), and *individual course completion* (61.7). These data indicate that respondents, when judging criteria for community college accountability, value most highly those factors related to student success as measured by rates of retention and completion of college courses and programs.

These views were reinforced in responses to the open-ended prompts. A number of respondents (Participants=39; Excerpts=49) described existing measures that should continue to assess community colleges. Aligned with the quantitative ratings, respondents endorsed continuing to use: individual course completion (generally and specific to gatekeeping or remedial courses), program completion rate (again noted generally and specific to certificate programs only), retention, graduation, transfer, and employment in field of study.

Aside from the highest average rated item of 70.2 (for *program completion rate*), the average ratings for seven items are in the 50s and 60s and the remaining nine items (more than half of the total) were rated below 50. Program completion rate may have obtained the highest overall rating because of program similarities to the university model. As noted, technical and terminal programs at the community college can include screening applicants, prerequisite completion, and a selective admission process. The average rating over all 17 items was 50.2 (*moderately accurate* in the language of the survey). These average ratings could suggest an overall mediocre opinion among respondents of most or all of the criteria typically used as predictive measures for community college accountability.

The open-ended responses help contextualize the quantitative item scores. Respondents explained the data cannot be viewed singularly; rather they need to be viewed holistically. One respondent stated:

Graduation rate is very important in that, if we don't credential students, why are we here? At the same time, it is a piece in the puzzle of student success for community college students. So it is an extremely accurate indicator (a school with a 10% graduation rate should be investigated regardless of other demographic constraints), but it isn't holistic (if that school has a 75% transfer rate, for example, it would be salvageable). (P48)

Another commented:

No single one of these criterion can be looked at alone. In order to gain insight, one must consider multiple criterion alongside one another. These criterion are all good places to start when looking for ways to investigate institutional accountability. However, they should be thought of as a starting point, and not a final score. (P38)

Despite the endorsements to keep some of the existing measures, the majority of respondents (Participants=74; Excerpts=178) explained aspects of existing measures that should be modified or completely removed from community college assessment in their qualitative responses. Among the bottom five ratings in the quantitative data were *typical student loan payment* (34.8), *student loan default rate* (37.1), *typical total debt for graduates* (37.5), and *most popular programs* (38.9). Further, the data indicate that the same respondents place relatively little emphasis on financial factors (debt, default, and loan payment). Finally, it is notable that, of the 17 predictive criteria listed in the survey, *SAT/ACT scores* was rated lowest (27.0), indicating that these respondents do not view this score data as an accurate measure of institutional accountability at community colleges.

SAT/ACT scores were, similarly, most commonly described as irrelevant to community colleges within the open-ended prompts. Respondents explained these data are not consistently collected or used at their institutions. One respondent explained, “We do not use ACT/SAT scores—[state] community college (open access)” (P96). Another noted changes at their college but not with score collection, “Although we recently began offering BA degrees, our college does not collect SAT/ACT scores” (P9). This is a clear example of why a university model cannot be applied as *one size fits all* to other institutions of higher education.

Another example is student loans. Some community colleges explained they do not offer loans to students or their tuition is very low; therefore, the measures related to student loans were “not meaningful” (P86) for their institutions. Additionally, because of the open door admissions policy, community college students may transfer in - after attending an unaccredited for-profit technical college or even a traditional four-year institution - with a great deal of debt that is unrelated to the community college. One respondent commented, “A large number of our students have attended more than one college; therefore, using student loan payments or debt does not speak to what they accomplished at our institution” (P40). Ultimately, institutions have no control over the amount of loans a student takes out if they qualify for the loans. When serving a large low-income student population, this measure could translate to students taking out loans despite low tuition. One respondent noted the lack of control a college has in this area, “We can’t do anything about how much a student borrows other than counsel them and provide resources to help them make wise decisions; however, in the end it’s up to them as to how much money they borrow” (P70).

The quantitative results reported above were, for the most part, consistent across the six regions in terms of rankings. For example, every region rated program completion items near the top of the list. There were no significant differences in ratings among these groups, with two exceptions, based on analyses of variance (and Student-Newman-Keuls ad hoc tests). Respondents from the New England region (New England Association of Schools and Colleges) rated two items significantly lower ($p < .05$) than the other five regions. Those items are program completion rate and employment rate. This regional variance is not further explained by the data collected.

The above results were also consistent across groups based on total enrollment, across groups based on housing (yes or no), and between colleges offering bachelor’s degrees and those not offering bachelor’s degrees. There were no significant differences in survey ratings among these groups.

One final trend in the quantitative data is worth noting. As discussed earlier in this report, rating scale items were selected primarily from two sources, namely the College Scorecard and state performance-based funding criteria. When comparing average composite mean scores for items from these two sources, a clear difference exists in respondents' judgments. For the 11 items derived from the College Scorecard, the composite mean rating is 45.20, while the composite mean rating for the 10 state performance-based items is 58.04 (both on a scale from 0 to 100). A paired samples t-test reveals that this difference is statistically significant ($p < .05$), indicating that respondents judged The College Scorecard criteria as significantly less useful than criteria used for state performance-based funding. This could indicate that the state measures, which address some of the criticisms of assessment for community colleges, are moving in the right direction. However, additional improvements are still needed.

Community college mission not assessed.

Beyond ranking the existing assessment measures, respondents noted what might be more important is what is missing from the existing criteria. The unique mission and population served by the community college do not appear to be seriously factored into the existing accountability measures. One respondent explained, "It is sometimes frustrating to be asked to provide the same statistics that are used as four-year institutions when our student body is much different in behavior and demographics" (P40). In the words of another respondent:

I think the measurement for the community college should not be driven by four-year centered success measures. Our roles and purpose is vastly different from them. Our focus is access, serving the population that four-year institutions have turned their back towards. Many of our students are a working population, going to school part-time. It's the place where Americans re-invent themselves. Hold us accountable for how well we better the lives of minority students and low-income students but in a timeline that reflects the reality on the ground. (P33)

Open door admissions.

Respondents were frustrated with the many accountability measures outside of their control (Participants=56, Excerpts=149). As one explained, "The question is: what outcomes does an open enrollment institution have influence over and to what extent?" (P198). It is unlikely these arguments are isolated to community colleges. Universities would similarly complain that state funding, the economy, and student post-completion salaries are largely out of their control. But, the open door mission is a concept that defines the community college (Shannon & Smith, 2006), and the powerlessness at the community college is likely more pronounced. For instance, the open door admissions policy creates an unpredictable variable in assessment that is currently not accounted for in any meaningful way. Community colleges have no control over their student populations, including who becomes a student (regardless of factors such as academic ability, criminal history, educational goal, life circumstances, and family status). According to one respondent:

We are an open admissions school. You need a high school diploma or equivalent to attend. Does that make us less accountable than a school that only accept the top 10% of its applicants? I think it makes us more accountable. We take EVERYONE and at least give them the opportunity to better their lives. (P167)

Another respondent added that cultural aspects similarly are not factored into the metrics, holding community colleges to standards that would be deemed unreasonable in many other fields:

Institutional accountability is important, but one has to take into consideration the make-up of the student body. One cannot make the assumption that all students want to earn an advanced degree and establish themselves in a career. For Native American students this often does not apply – ‘career’ by definition is a Western concept, as Native cultures emphasize the wellbeing and success of the collective over the individual. Many factors are outside of the control of the institution. For example, if our country were to establish similar ‘accountability’ measures for the medical profession as they do for educational institutions, doctors/hospitals might be judged on the lifespan of their patients, the percentage of patients who do not develop cancer or diabetes, etc. This may seem a far-fetched example, but everyone understands that doctors do not control their patients’ life style, amount of stress they are under, nutritional habits, exercise habits, etc. Similarly, colleges should be held accountable for factors they are able to control, but not for factors outside of their control. (P152)

Beyond ignoring the community college mission, some of the existing measures punish the community college for its mission. As open door institutions, community colleges allow students to enter when they have a need or interest and to leave when their life circumstances or interests change. However, community colleges are viewed negatively when their students take advantage of this purposeful flexibility:

Accurate assessments of accountability should focus on those areas where the institution can exert some control. Particularly in community colleges, completion rates are inaccurately used and overemphasized. The very mission of a community college is sometimes in conflict with these measures -- often, a student will attend a local community college to complete two or three prerequisites for a four-year school, or to take a class or two because of schedule conflicts at a different institution. Because these students never ‘complete’ a program, they are counted as a stop-out. (P42)

Students not included.

One of the most common complaints by respondents was that the community college student population largely is not captured using a first-time, full-time cohort, as in IPEDES. The following comment reflect this concern:

In general, I find the measurement to be heavily influenced by a four year model. Retention rate and graduation rate does not accurately account for majority of the work we do. For example, the first-time full-time degree seeking cohort account for 5% of our total student population. (P33)

Similarly, another participant explained, “As best I can tell, completion and retention rates are based solely on full-time students. Part-time students who earn degrees over time while working and supporting a family are considered to be failures in the current measurement methodologies” (P167).

Even when the cohorts are expanded to include part-time students but only track students for a discrete period of time to measure graduation rates, respondents argue it still insufficiently captures the successes of students attending community colleges. Because the offerings, needs, and reasons for attending are so diverse, it can be challenging to assess “success”:

I have problems with ‘rates’ in general because of the nature of the community college. It is very difficult to isolate a cohort as a denominator to calculate the rate. Our students are in and out; they may have a course or two that precludes their inclusion in a first-time cohort, or an adult learner comes to college for a few professional development courses, and

stays to complete a degree. Often, students have learning support that prevents them from completing 'on time'. What is really on-time for a student who is consistently working toward completion of their academic goals? The rates do not give a very good picture of the work we are doing with the populations we serve. (P164)

In the survey ratings discussed earlier, community college administrators prioritized assessments of student success over other performance indicators. However, these narrative responses suggest that success itself may be a construct that would be defined differently among community colleges, in accordance with particular missions and demographics.

Geographically bound.

Community colleges also serve a specific geographic region and, therefore, are regionally confined. This regional focus impacts who their students are in addition to the transfer options available to students who do not want to relocate. In the words of one respondent, "I think it's important to consider the distance to the nearest major 4 year college or university. That proximity seems to be a reliable, but somewhat small indicator of college performance" (P27). Many students attend a community college because they do not want to leave their hometown. In some cases, that hometown is an economically impoverished area and the regional salaries are low due to the surplus of employees. Respondents explain how this culmination complicates accountability at community colleges, "earnings are problematic in a district with the highest unemployment in the nation and with a predominance of agricultural jobs" (P163). Additional comments reflect similar concerns:

All of these factors involve regional capability. Are there jobs available? Are the salaries consistent or competitive within the region? For example, a student who graduates with an associate's degree in child development may find a position that pays only slightly higher than minimum wage in our region. Is this something that a college should be assessed on as we don't drive salaries within our region? (P2)

We have also found that some of our students are not employed, or employed at a higher salary job, because of their own choice. They don't want to leave the area to search for these jobs or they decide that they don't want to work in that area. Directly linking employment and salary to our accountability assessment is problematic for these reasons. (P40)

These findings are corroborated in the quantitative data. Several of the lowest survey rankings were for items related to financial factors, such as salary after attending and typical total debt. This suggests that these indicators are not highly valued among community college administrators as valid measures of accountability.

Heterogeneous community colleges.

Not only did respondents view community colleges as unique from universities but they explained that community colleges are not a homogenous group. While the same could be argued to an extent when comparing universities, the goal generally of universities is degree completion with some level of selective admissions process. Additionally, universities are classified by size, scope, and mission so it is possible to compare like institutions. Community colleges are not classified in the same manner. Their offerings can focus on degree completion, transfer, vocational training, continuing education, and remedial education and those goals do not even begin to take into account their diverse student populations served by those colleges, as reflected in the following comments:

Each school would likely have a different set of metrics as their student profiles and missions

can be substantially different. For example, we have a wide variety of students at our institution. Some students wish to complete a technical program to enter or re-enter the workforce, some wish to complete an Associate's degree to transfer to another institution, others just want to take a few courses to transfer or for personal betterment. These all impact the metrics that we can and should use. (P118)

I believe it's unfair that all two-year colleges are lumped together in any accountability reports. Colleges with AA and AS degrees and transferability missions will never have high graduation rates. Technical colleges like mine (AAS degrees, diplomas, certificates) enjoy high graduation rates, and we always come out looking like we are so much better institutions than community colleges. That's good for us, but whenever I see it published in the various scorecards out there I'm a bit chagrined. (P60)

It is interesting in this regard that transfer rate was in the top half of survey ratings as a useful metric for judging community performance. Specifically, *transfer rate* was rated 10 to 20 percentage points higher than some other indicators, including *typical total debt*, *salary after attending*, and *most popular programs*. The transfer patterns of students are clearly of interest to community college administrators for a variety of reasons unique and specific to each community college. This interest could explain why some respondents endorsed the existing measures as accurately assessing their work but others found the metrics out of touch with the work they complete. Unfortunately, some of the existing measures consistently disadvantage community colleges.

Inadequate data and outdated metrics.

In addition to life circumstances that are outside of the community colleges' control, the data and data sources are also commonly outside of institutional control. As was alluded to in the initial concerns over ranking the metrics depending on the data source, respondents argued, if the data could be improved, the metrics would be more accurate. Specifically, one respondent stated:

The problem with using program completions or graduation as markers of success for community colleges is that many of our academic students will complete one or two years of coursework, then transfer to a four year school. The only way we can find those students is to individually search for them in the national clearinghouse, which makes it an extremely lagging indicator. If we were able to track students within higher education as they move to a different institution, we would have a better yardstick of success...We need to be able to track our students when they leave our college. We rely on employer surveys and student surveys when we should be able to determine where our students go when they leave us. Right now we are flying blind with a large percentage of our students, because we cannot easily follow their path once they leave our institutions. This is a policy change that is needed on the national level. We can allow institutions to track students in ways that are still respectful of their privacy. We can't try to hold institutions accountable for their service of those students when we haven't allowed the institutions to find the students as they leave, let alone figure out why they left. (P112)

These issues of lagging and inadequate data are not limited to community colleges. In fact, as community colleges offer Bachelor's degrees, national data sets need to update their classifications to reflect these evolving institutions of higher education or there will be implications for the broader field of education. One respondent provided the following explanation:

The majority of definitions applied by the USDOE [U.S. Department of Education] are antiquated and out of touch with community colleges. Graduation rate is the most common

example of this, however, my institution implemented one bachelor degree in January 2017 (RN [Registered Nurse] to BSN [Bachelor of Science in Nursing] program) and as a result, we are now defined by the USDOE as a four-year institution, despite the other 100+ associate, diploma and certificate programs we offer. This new classification skews some of the critical IPEDS data reported at the national level, specifically, completion and retention. EXAMPLE: Because of their definition for retention being based on first-time, full-time students, and because they do not offer a field for us to report associate degree vs. bachelor degree students, we are forced to only report on the retention of the 90 BSN students currently enrolled. And for those students we have to report “zero” in that field because none of the RN to BSN students are first-time, full-time, due to their previous study in the ADN program. These reports cause inaccurate perceptions about the quality of instruction and programs to the public and others who choose to assess an institution based on IPEDS figures without understanding the restrictions placed on institutions due to USDOE definitions. USDOE desperately needs to assess their own reporting process for institutions of higher education! (P14)

The same outdated, class-based measures are evident in financial aid formulas which can directly impact a student’s ability to succeed:

Students attending have different lives than students 20 years ago. A student may be 22, still living at home, and have familial responsibilities to other young relatives in the household. In [urban] County, the cost of housing means that a student in this situation is likely helping the family with rent/food/etc. The financial aid formulas do not really account for this situation-- it is implied that families help students, students have to help their families. (P96)

Proposed Solutions

Community colleges are unique institutions and require an assessment tailored specifically to them. This is evidenced when examining the fit of existing measures and exploring new measures. Many respondents felt strongly that existing measures were not appropriate for community colleges, but they did want to be held accountable with metrics that were developed specifically for their institutions. One explained, “None of these are great for community colleges. If the Grad Rate refers to the IPEDS 150%, then definitely not. There are other graduation/success metrics from Achieving the Dream or the Voluntary Framework of Accountability which are more appropriate” (P134).

Respondents recommended expanding the existing student cohorts to take account of all of their students, including non-degree seeking students, transient students, dual enrollment students, returning students, second career students, and post-bachelor’s or post-master’s students. Additionally, respondents advocated to expand demographic data on students to include age, financial aid, socio-economic status, hours worked, academic remediation needs, generation of immigration, first generation in college, foster care, displaced worker, family status, high school grade point average, student resources (e.g. childcare), aid from all sources, and remaining need (including books and supply costs). These recommendations are reflective of the diverse student populations served by community colleges, which do not neatly fit into the mold of traditional university students. However, expanding student characteristics in these ways would also assist universities who serve non-traditional student populations.

Respondents also proposed a number of additional items that could help capture the work of the community college. Most commonly, respondents advocated for including student goals in

the assessment of community colleges. Because student goals can vary so drastically at an open door institution, identifying them and tracking student progress towards their goals would be a more accurate institutional accountability. One respondent explained, “Again – not all students entering a community college seek a degree – however, did we meet their needs/intent?” (P111). Interestingly, this changes the perspective from what decision makers think students’ goals should be, to the reality of student goals as this respondent highlights, “Student perception of educational goal completion” (P74). Respondents also commonly noted that student learning was omitted from these federal and state accountability measures but should be included in institutional assessment, as the following comment indicates:

While many of the above are common or mandated accountability measures, in my opinion, it doesn’t reflect actual student learning, and therefore real institutional accountability. While we can infer course completion, program completion, and graduation rates as success, it doesn’t take into account whether students learn the skills we claim they are learning, are suitable for employment, or are prepared when they transfer to a four year school. (P94)

A comprehensive list of the respondents’ proposed assessment measures with definitions is included in the table on the next page.

Proposed Measures to Assess Community Colleges

Proposed Measure	Definition
Student Goals	Identifying and tracking individualized student goal achievement
Student Learning	Assessment of student learning
Student Satisfaction	Student satisfaction ratings of college, services, courses
Other Existing Measures	Achieving the Dream metrics, the Voluntary Framework of Accountability
Employee Ratios, Retention, & Representation	Ratio of faculty to students; ratio of staff to students; race, ethnicity, gender, disability representation in employees matching student population served; employee satisfaction and retention
Eliminating Achievement Gaps	Progress in narrowing achievement gaps between racial/ethnic groups
Post-Community College Outcomes	Transfer GPA, life outcomes including health, incarceration, public assistance
Licensure and Certification Rates	State and national pass rates on professional exams
Stop Out	Tracking students who stop attending and their reasons for stopping
Community Relationships and Impact	Assess the relationship with the local community and the perceptions of the college within the community
General Education as a Public Good	Global and informed citizens engaged in art, culture, politics, service
Fiscal Accountability	Economic impact of community colleges, return on investment, and the use of funding
Support Services	Usage of support services including tutoring, food bank, counseling, day care, community referrals for basic needs not offered by college
Student Interventions	What and when are colleges intervening with students, effectiveness of interventions
Diverse Course Offerings	Days, times, locations, formats of courses offered
Continuing Education	Workforce training opportunities provided by the college for the community
Return on Investment for Student	Money spent by student on program and long-term salary increases

RECOMMENDATIONS

Based on our findings, we recommend the discontinuance of existing assessment measures, specifically the College Scorecard in its current form, for community colleges. Community college in the field experts do not view it as an accurate measure to assess the quality of community colleges. For those governing bodies who currently use the College Scorecard to assess or hold community colleges accountable, we recommend you discontinue this practice. For those who are considering including the College Scorecard in their assessment of community colleges, we advise against its incorporation.

Rather, in order to educate students, families and other stakeholders on the effectiveness of community colleges, new criteria should be established and a Community College Scorecard created. These new measures will help stakeholders understand the unique conditions at community colleges and the unique ways in which they serve students in their communities.

In designing a specific Community College Scorecard, as new criteria are established, writers should be sensitive to the measures that will assist in understanding the reality at community colleges. For example, a measure could be included that seeks to understand previous student loan debt and loan debt incurred while enrolled in community college. A second example would be removing the criteria of SAT/ACT. Given the open door nature of community colleges, this measure is unnecessary. Our work is a starting point of potential metrics to include based on the in the field expertise of directors and coordinators of community college assessment. Ideally, a diverse committee of these experts would be assembled to discuss and determine criteria that specifically address the unique nature, mission, and values of the community college.

As new accountability measures are designed for community colleges, we also recommend that attention and respect be paid to the local needs and priorities of community colleges. To this end, and in accordance with current trends in education overall (Brookhart, 2005; Gagnon, 2016), assessment metrics should include specific criteria designed for and by the community colleges themselves. As administrators choose and implement locally-relevant accountability assessments, the results of these self-assessments will be immediately applicable to community college reform and improvement at the local level.

In addition to creating a new measure, the commonly employed IPEDS classifications for community colleges need to be expanded. The current three categorizations are limited, dismissive, and potentially skewing national data. As one participant noted, their college is classified as a four-year college because they offer a single bachelor's degree program. At the time of this writing, there is a new reality and breadth of diversity among community colleges. The call for updated classifications is generated by a variety of stakeholders. Some stakeholders are passionate about the equity treatment of community colleges in the system of higher education. Others may be reacting to the negative influence community college data has on the high marks for universities. Others may want a classification that just makes good sense for the communities they are serving. Regardless, it is clear that the current system is not effective. Community colleges, by their very nature, are regional institutions, reflective of their communities and serving local needs. Institutional size and scope need to be taken into account for community colleges, the same way they are in the university classifications.

CONCLUSION

The current existing criteria used to assess community colleges do not generally correspond to the reality of the community college environment. Using a traditional four-year university model as the yardstick for community colleges can result in a deficit rating for community colleges. This deficit rating will not portray community colleges as institutions which value and contribute to student success. Additionally, this research affirms that community colleges are exceptionally complex institutions, not a “one-size-fits-all.” Researchers and policy makers should take heed of these results and begin to acknowledge the differences between community colleges and universities as well as among community colleges themselves. It is unfair to students, families, community members, faculty, staff and other stakeholders to hold community colleges accountable with bad data and poor metrics, in some cases penalizing them needlessly. A new measure should be developed specifically to assess community colleges in order to provide accurate information to potential students and to truly hold community colleges accountable for the work they do. Until this is done, the mandated reporting of limited data will continue to improperly use valuable resources and offer an inaccurate view of community colleges.

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