A Qualitative Description Investigation of U.S. Higher Education Quantitative Datasets

Mia Ocean  
*West Chester University of Pennsylvania, mocean@wcupa.edu*

Karon T. Hicks  
*West Chester University of Pennsylvania, karon.hicks20@gmail.com*

Follow this and additional works at: [https://nsuworks.nova.edu/tqr](https://nsuworks.nova.edu/tqr)

Part of the Community College Leadership Commons, Higher Education Commons, Quantitative, Qualitative, Comparative, and Historical Methodologies Commons, and the Social Statistics Commons

**Recommended APA Citation**
Ocean, M., & Hicks, K. T. (2021). A Qualitative Description Investigation of U.S. Higher Education Quantitative Datasets. *The Qualitative Report, 26*(3), 696-713. [https://doi.org/10.46743/2160-3715/2021.4397](https://doi.org/10.46743/2160-3715/2021.4397)

This Article is brought to you for free and open access by the The Qualitative Report at NSUWorks. It has been accepted for inclusion in The Qualitative Report by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.
A Qualitative Description Investigation of U.S. Higher Education Quantitative Datasets

Abstract
Currently, the U.S. system of higher education is almost exclusively evaluated by quantitative data based on traditional student trajectories and university structured programs. This could be problematic for community colleges and post-traditional students, who are a growing population at all institutions. Therefore, we conducted a pilot, qualitative description analysis of three U.S. quantitative national datasets to assess their accuracy and identify factors that influence classifications. We interviewed individuals (n=13) who would qualitatively be considered success stories, specifically individuals who attended community colleges during their undergraduate studies and ultimately high ranking graduate programs, to gather information about their educational timelines. In some cases, the datasets would classify these individuals as completers but not always. Participants would be classified as non-completers for two major reasons: transfer prior to Associate degree completion and limitations with prescribed timelines. The latter is complicated by the perceived freedom of the open door policy at community colleges. The results from this study indicate a need to modify existing quantitative metrics to purposefully incorporate community colleges and their students, and the findings reinforce the importance of qualitative research in higher education.

Keywords
qualitative description, higher education, community colleges, quantitative evaluation

Creative Commons License
This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 4.0 License.

Acknowledgements
We want to thank the participants in the research for sharing their stories, experiences, and expertise.

This article is available in The Qualitative Report: https://nsuworks.nova.edu/tqr/vol26/iss3/4
A Qualitative Description Investigation of U.S. Higher Education
Quantitative Datasets

Mia Ocean and Karon T. Hicks
West Chester University of Pennsylvania, USA

Currently, the U.S. system of higher education is almost exclusively evaluated by quantitative data based on traditional student trajectories and university structured programs. This could be problematic for community colleges and post-traditional students, who are a growing population at all institutions. Therefore, we conducted a pilot, qualitative description analysis of three U.S. quantitative national datasets to assess their accuracy and identify factors that influence classifications. We interviewed individuals (n=13) who would qualitatively be considered success stories, specifically individuals who attended community colleges during their undergraduate studies and ultimately high ranking graduate programs, to gather information about their educational timelines. In some cases, the datasets would classify these individuals as completers but not always. Participants would be classified as non-completers for two major reasons: transfer prior to Associate degree completion and limitations with prescribed timelines. The latter is complicated by the perceived freedom of the open door policy at community colleges. The results from this study indicate a need to modify existing quantitative metrics to purposefully incorporate community colleges and their students, and the findings reinforce the importance of qualitative research in higher education.

Keywords: qualitative description, higher education, community colleges, quantitative evaluation

The U.S. system of higher education is dominated by quantitative evaluation. National datasets rely exclusively on quantitative data to define and determine student and institutional success. Complaints and critiques have been voiced in the field for years about the national datasets and the lack of qualitative research in higher education (Covarrubias et al., 2018; Tierney & Clemens, 2011). Still, there is limited research to evidence problems with the datasets, and we were unable to find any qualitative examinations of the quantitative metrics. Most changes have occurred via legislative action, but modifications can also be prompted by the Secretary of Education and input from the field (Rorison & Voight, 2016). More research is needed to identify and document concerns with the national datasets so they can be improved. At this point, the inaccurate outputs reinforce the hierarchy in the U.S. higher education system and label community colleges as inferior despite the very different mission they serve.

Community colleges have a primary mission of access, and they offer an open door admissions policy which creates an opportunity for virtually anyone who is interested in pursuing higher education at any time in their lives (Cohen et al., 2013). However, the admissions descriptor can be misleading. In higher education, we commonly associate admissions with a one-time event, but the open door policy at the community college allows students to enter, exit, and re-enter as their interests and life circumstances change. Perhaps because of this policy, community college students less commonly fit the traditional student profile, even in times when university student populations are shifting. For instance,
community college students are more likely to work full-time and study part-time and most are older than 22 years old (American Association of Community Colleges, 2019). Additionally, without community colleges and their open door admissions policy, there would be less low-income, Black, Indigenous, Latinx, and first-generation students enrolled in higher education in the U.S. (Bragg & Durham, 2012).

This is often where the accolades end, and the criticism of community colleges begin. University researchers argue community colleges provide access but not success for students, citing that community college students are less likely than their university counterparts to complete educational credentials in the same amount of time (Monaghan & Attewell, 2015). The assumptions underlying the premise of this investigation are problematic. Community college students likely do not have accurate matches at the university. Individuals who attend community colleges often have different life circumstances (which impact their very choice to attend a community college) than university students, but these circumstances are not captured in the quantitative metrics (Doyle, 2009; Ocean et al., 2018). Additionally, the current measures do not meaningfully incorporate the unique mission and practices of community colleges and the students they serve (Bragg, 2001).

When using metrics developed by and for universities, it is perhaps not surprising that universities appear more favorably than non-university institutions (Ocean et al., 2018). For instance, it is not in the mission of most universities to assist students in transfer to another institution to complete their bachelor’s degree, yet this is a central focus at many community colleges. Currently in the largest quantitative dataset, all transfers are viewed as equal, but community college advocates argue community college students who transfer to a university should be more highly valued compared to students who transfer from one university to another university (Newman, 2014). Regardless, the quantitative output continues to contribute to the devaluation of community colleges, and the potentially inaccurate data are becoming increasingly important as state governments implement performance-based funding (McKinney & Serra Hagedorn, 2017; National Conference of State Legislatures, 2015).

Performance-based funding penalizes institutions that serve students living with low-incomes and students who come from inadequately funded secondary schools (Bailey et al., 2015; McKinney & Serra Hagedorn, 2017). Consequently, institutions seek to enroll students with higher standardized scores and fewer first generation students which limits access to higher education especially for minoritized populations (Gándara & Rutherford, 2020). Further, performance-based funding can hinder a productive learning environment and diminish academic freedom due to its hyper focus on completion and outputs (Lanford, 2020). At a minimum, the metrics should be tailored to the unique institutional missions and student populations (Li, 2019).

The same issues are heightened in private sector rankings. Universities and programs are ranked not only using typical metrics like graduation rates but also many more obvious class-based measures like student selectivity, faculty resources, and average alumni giving rate which cyclically reinforce power and financial disparities (Morse & Brooks, 2020). It is incumbent upon tertiary education to move beyond these limiting, quantified values and avoid reproducing inequities within and beyond higher education (Hazelkorn, 2017; Pusser & Marginson, 2013; Shahjahan et al., 2017).

An exclusive focus on quantitative data to describe and assess higher education is not unique to the U.S. Many countries participate in quantitative assessments to assess and conduct regional comparisons for example, the South and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) and the United Nations Educational, Scientific and Cultural Organization’s (UNESCO) Latin American Laboratory for Assessment of the Quality of Education (SACMEQ, 2019; UNESCO, 2017). Moreover, quantitative datasets exist at national [e.g., Statistiche Università e Lavoro (Italy)], regional [Eurostat (European Union)],
and global levels (The World Bank EdStats; European University Institute, 2019; The World Bank, n.d.), yet we were unable to find any qualitative datasets available at these levels. Quantitative data are imperative to investigate mass scale patterns in higher education, but why are we not simultaneously investing in qualitative research to assess and evaluate higher education? Additionally, what is the role of grant funding in defining and determining valuable research? How can we be confident we are not missing key elements to higher education achievement and attainment?

Within this article, we present a qualitative description examination of the three major U.S. higher education datasets that evaluate student and institutional success. We critiqued routinely employed and thereby taken for granted quantitative measures in higher education. We identify the strengths and challenges with the existing criteria. Because this research qualitatively examines quantitative datasets in the U.S., policy analysts, researchers, and advocates in U.S. higher education are the primary intended audience for this article. However, while this research is specific to the U.S., we are simultaneously investigating the larger issue of relying exclusively, or almost exclusively, on quantitative data to evaluate students and institutions of higher education. Therefore, the results are also beneficial for education researchers in countries that focus almost or exclusively on quantitative measures to evaluate their educational system.

Our findings provide insight into existing research that employed the quantitative datasets as well as ways to improve the existing quantitative measures themselves. Additionally, because we document challenges with the existing metrics specific to community colleges (albeit we are likely documenting what is anecdotally known by community college employees), this article can serve as an advocacy tool for improved, customized measures that include the unique mission and student population served by community colleges.

**Literature Review**

To contextualize this research, we provide an overview of the three major U.S. higher education datasets that measure student and institutional success. Then we discuss the lack of qualitative research in higher education and why that is problematic before detailing our theoretical framework and research questions.

**National Quantitative Datasets**

As noted, the vast majority of evaluation research in higher education is completed using national, quantitative databases. The National Center for Education Statistics (NCES) began tracking student cohorts in 1972. In its first iteration, students were tracked for 14 years after high school, but this time has steadily decreased in subsequent versions (the fourth cohort was tracked for 8 years). The National Educational Longitudinal Study (NELS88) dataset has often been used in the research literature (Crisp & Delgado, 2014; Lockwood Reynolds, 2012). The study began in 1988, with a cohort of purported nationally representative 24,599 8th graders, and continued to gather data through the Fall 2000 post-secondary transcripts, tracking students for 8 years post-high school. There are five iterations total of the longitudinal study. The datasets contain information on student transitions into secondary education, post-secondary education, and the workforce. Additional cohorts have been followed and continue to be tracked focusing on the same metrics\(^1\) (NCES, n.d.d).

\(^1\) For the sake of simplicity, we refer to this dataset as NELS88 with the disclaimer that additional cohorts exist but essentially track the same items.
A limitation of the NELS88 is that it does not track adults who enter the post-secondary system later in life. The Beginning Postsecondary Students (BPS) was first implemented in 1990 (NCES, n.d.a) and addresses this limitation by tracking students from when they begin their post-secondary studies (at any age) for six years. Student cohorts range from 8,000-16,000 students. Similar to the NELS88, it gathers data on progression through post-secondary education study, student demographics, and employment information (NCES, n.d.c) and has been cited in the research literature regularly (Doyle, 2009; Monaghan & Attewell, 2015).

Unlike the BPS and NELS88, the Integrated Postsecondary Education Data System (IPEDS) tracks institutions not students. Its first iteration was the Higher Education General Information Survey, and over the years, it has evolved and now requires the approximately 7,500 institutions that participate in the federal financial aid program to report data annually (Institute for Higher Education Policy, 2015). Post-secondary institutions are required to report on many items; the two areas that relate to this research include graduation rates and other measures (NCES, n.d.a). Graduation rates are a relatively newer metric added in 1997 and are calculated for institutions using full-time, first-time in college students (Fuller, 2011). These students must begin and finish their studies at the same institution within 3 years to count as graduates in the institutional graduation rate at a community college (NCES, 2016). This means a community college transfer student who did not complete their Associate degree but completes their bachelor’s degree at a university is “forever considered a college dropout” in the data, which is disempowering and incorrect (Stuart, 2013, para. 1). IPEDS has recently begun to track graduation rates for additional student cohorts, including first-time, part-time; non-first time, full-time; and non-first-time, part-time, for up to eight years in their outcome measures data (Lederman, 2017; NCES, n.d.b). However, the official institutional graduation rate remains the same, limited to full-time, first-time students. These statistics are used to rate institutional success which is publicized in the Federal Scorecard and many of these same metrics are used in state level performance-based funding (College Scorecard Data, 2018; National Conference of State Legislatures, 2015).

These reductionist student samples and constrictive timelines are reinforced in guidance to community colleges on how to improve often without regard for their open door mission. When the open door mission is acknowledged, the focus is on developmental education requirements which can slow a student from on-time completion (Baldwin Grossman et al., 2015). Community college practitioners are framed as able to “boost students’ momentum” or cause students “to lose steam in pursuing their goals” (Rassen et al., 2013, p. 15). This is also framed as an individual student failing, “Most students begin their college career by taking too few credits…” (Complete College America, n.d., para. 8) with slogans like, “15 to finish” touted as the solution (Complete College America, n.d., para. 9). This over simplistic focus on outputs fails to take into account the challenges of living in poverty and any actual interest or investment in learning. There is a need to critique our taken for granted quantitative measures that may be ignoring key pieces of student trajectories in higher education and that have serious implications for institutions.

Qualitative Research in Higher Education

Currently, there are no publicly available, government-funded qualitative higher education datasets in the U.S. The domination of quantitative research is problematic for several reasons. To begin, critical race theorists have long argued the dominance of quantitative data eliminates the powerful sociohistorical factors and commonly reinforces racial inequities and deficit models (Covarrubias et al., 2018). Additionally, many critical race theorists, Black feminist scholars, and other critical theorists have used theory to critique the assumptions embedded in quantitative research in higher education and argue to use qualitative research to
investigate and combat researcher bias when quantitative research dominates (Malina et al., 2011; Mullings, 2000).

 Truly, qualitative and quantitative methods could be used in conjunction, gathering multiple types and sources of data, to create the most comprehensive understanding of the phenomena being studied (Atieno, 2009; Malina et al., 2011). This is especially true for longitudinal educational studies (Cole et al., 2019). Qualitative research can complement and challenge quantitative research by helping to explain or expound on quantitative findings, but institutional, state, and national leaders are not taking advantage of this additional type of data to improve policy and practice (Creswell et al., 2002; Robson et al., 2001; Tierney & Clemens, 2011).

 Additionally, qualitative research allows us to simultaneously examine the perspective embedded in existing research and examine existing data in novel ways (Atieno, 2009; Guzmán-Valenzuela & Barnett, 2019). The definition of success in the education system is commonly framed by a White, male, middle class, and individualistic lens (Stanton-Salazar, 1997), and the quantitative metrics have been only minimally updated over the many decades despite the continual shift of the student body in higher education (Rorison & Voight, 2016). This means the complexities of the students’ experiences are not being captured, including the unique pathways of community college students. Some students may be classified as non-completers in the quantitative datasets but may actually be completers in qualitative research. This is likely the case for students who pace their studies, take breaks, or have educational goals of course completion rather than credential completion (Borden, 2004; Kinser & Deitchman 2008). Additionally, by requesting unhelpful data from under resourced institutions, such as community colleges, we are not using the limited resources in the most efficient manner for accurate evaluations (Ocean et al., 2018). It is important to gather facts on what is occurring and present fairly unaltered information that will be useful to policy makers to improve our system of evaluation (Lambert & Lambert, 2012; Sandelowski, 2000).

 Therefore, within this pilot study, we used an expansive lens allowing participants to share their educational journeys and timelines without preconceived limitations. We sought individuals who would be termed successful and completers in qualitative research to compare how they would be classified in the three major quantitative datasets. We operationalized qualitative completers as individuals who attended community colleges as well as high ranking graduate social work programs. While it is exceptionally competitive to transfer to a high-ranking university as an undergraduate transfer student, graduate education provides a new opportunity for transfer into elite institutions (Dowd et al., 2008). However, because at the graduate level, programs are ranked rather than universities, we chose a specific program, social work, to narrow our focus. Social work’s defining theory, ecological systems perspective, analyzes individuals within their larger systemic context (Bronfenbrenner, 1995). While we did not use this theory directly to guide our analysis, it is relevant to our research focus and as we were piloting our interview guide, it was helpful to have an informed sample to begin our work in this area.

**Framework**

To conduct this research, we used a critical theory interpretivist framework (Creswell 2013). This lens allowed us to critique the legitimacy of social institutions and taken for granted social constructions accuracy (Fay, 1987). We sought to critique the quantitative metrics that judge the success of students and institutions. We created a platform for new perspectives by enlisting participants who have been judged and impacted by those judgments through national and state educational policy.
Research Questions

We sought answers to the following research questions: How would qualitative successes, individuals who attended a community college and a high ranking social work graduate program, be classified in the U.S. quantitative datasets? What contributed to the accurate or inaccurate quantitative classifications?

Role of Researchers & Trustworthiness

Both researchers approach this topic with an interest in social justice within the U.S. educational system. We are interested in investigating perspectives via qualitative research that are currently omitted from the research and larger higher education evaluation conversation. Mia is an individual who attended a community college and a high ranking graduate social work program. Karon has completed her graduate degree in social work but did not attend a community college or a high ranking graduate social work program. We believe our differing educational backgrounds and common interest helped us to remain grounded in our investigation. Our goal is to add more generalizable knowledge to the topic of evaluation in the U.S. system of higher education to inform future policy and practice.

To minimize our own perceptions from skewing the results, two professors at high ranking graduate social work programs and two professors at non-social work graduate programs, were consulted throughout the research process. They provided feedback on the methodology, semi-structured interview guide, coded data, and preliminary results (Fernald & Duclos, 2005). However, because we similarly did not want university voices to overshadow the participants’ stories, we conducted participant checking, requesting two participants from the study to review our findings and provide feedback (Birt et al., 2016; Creswell, 2013). We completed adjustments based on their feedback before submitting this manuscript for peer review.

Methods

We drew on qualitative description (QD) research to investigate the accuracy and effectiveness of the quantitative measures. The goal of QD is to present an accurate account of events (Sandelowski, 2001). In this way, QD researchers document what is occurring, instead of what we assume is happening, using the voices of those directly impacted by a phenomenon (Asbjørn Neergaard et al., 2009; Bradshaw, Atkinson, & Doody, 2017; Kim et al., 2017). QD researchers may follow a QD process or even a content or thematic analysis, but they consistently focus on an objective description or presentation of facts (Kim et al., 2017; Savin-Baden & Howell Major, 2012). This can be helpful for instrument development and refinement as well as prompting practical change (Chafe, 2017; Sullivan-Bolyai et al., 2005). Similar to a mixed methods explanatory sequential design, our goal was to conduct qualitative research to learn more about and to help explain the quantitative findings (Creswell & Plano Clark, 2017). Therefore, we conducted semi-structured interviews (n=13) and requested participants create handwritten educational timelines. We then compared their experiences with the quantitative educational measures of success. Prior to commencing our research, we received approval from an Institutional Review Board. We detail our participants, data collection, and analysis in this section.
Participants

Individuals who attended a community college and a graduate social work program ranked 25th or higher according to US World News and Report were eligible to participate in the study. Participants could be currently enrolled in their graduate social work program or alumni of a program. While we acknowledge the limitations of the rankings, we wanted to draw on a population that would broadly be considered success stories, students who traversed from community colleges into the upper echelons of higher education. During the summer of 2011, we recruited participants at high-ranking, graduate social work programs in the Northeast both directly by advertising the study on student email list-serves and on campus flyers and indirectly by requesting faculty share the research opportunity with their current students. A total of 13 individuals participated in the study. Participants created their own pseudonyms and identified their demographics via open-ended prompts. The sample included more White individuals (White=10; Black=1; Asian=1; Portuguese=1) and more women (Women=10; Men=3). Three individuals identified non-English languages as their first language and were born outside of the U.S. Participant ages ranged from 24-55 with an average of 37 and median of 41.

Data Collection

One of the research team members, specifically Mia, met with participants one time for approximately one hour in person in a convenient location for the participant, commonly a borrowed space on the university campus or at participants’ place of employment. Participants completed the informed consent form and were compensated $15 for their time. Participants were asked to write their timelines as they discussed their educational journeys. We audio recorded the interviews and retained the handwritten educational timelines. We used a semi-structured interview guide to gather consistent data without rigidifying the interview process (Patton, 2002). Mia and paid transcriptionists transcribed the interviews. All data were stored and shared on a password protected Dropbox account. Mia then verified and de-identified the transcripts preparing them for analysis.

Analysis

Using the data from participants’ handwritten timelines in conjunction with the data from their interviews, we created easily accessible educational timelines, including pertinent transfer and graduation dates for each participant. We then used the timelines to classify students as completers, non-completers, or not included for each of the three databases based on their criteria and time limits. For example, only students who were enrolled in grade school and high school in the U.S. were included in the NELS88 calculations. Therefore, not included was listed for participants who attended secondary schools in other countries. We classified other participants as completers or non-completers at both the Associate and Bachelor levels over the eight-year period beginning when they were scheduled to graduate from high school (NCES, n.d.d). Similarly, we classified the participants based on the BPS criteria. Therefore, we determined if participants would be quantitatively classified as a completer with an Associate degree or Bachelor’s degree or both within six years of beginning their studies at a post-secondary institution (NCES, n.d.c).

Lastly, we determined if participants would be considered a completer or non-completer for institutional statistics per the IPEDS criteria. Institutional graduation rates only consider participants who began their studies as a first-time, full-time student at a community college. Therefore, not included was listed for participants who began their studies at another
institution, and participants who completed a credential at the community college within three years were considered a *completer* for this measure. For the second IPEDS item, outcome measures, participants who completed a credential within eight years of beginning at a community college were classified as a *completer*, regardless of when they began their studies or if they studied full or part-time (NCES, n.d.a).

QD includes not only counting participants but also seeking explanations and descriptions of the patterns of the data (Sandelowski, 2000). Therefore, we read through the transcripts, seeking factors that impacted participants’ timelines. We developed brief codebooks based on the existing literature and theory. In line with our critical theory perspective, we drew on Brint and Karabel’s (1989) theory of democratization and diversion. They argued community colleges possess a democratization function for students who otherwise could not attend college, but a diversionary property for students who could begin initially at a university. We expanded the focus beyond the community college as an institution to investigate broadly agents of diversion and democracy in conjunction with the existing literature. For instance, working full-time is associated with hindering degree attainment for community college students. Consequently, these incidents were coded EF:Work:Div or Environmental Factor:Work:Diversion. However, because we were also looking to expand beyond what is presently known, we also included *other* codes (Meinefeld, 2004). This allowed us to identify new phenomena that impact students’ educational attainment.

We created tables for coded data. Tables were created both for participants and for code. This allowed us to look at the data across participants and across codes (Miles & Huberman, 1994). We also developed narrative summaries for each participant (Way, 1998). We included influences that impacted participants’ educational goals and their completion timelines. For instance, Becky took time to work right after high school which clearly impacted when she began and finished her studies so this was included in her narrative summary. We included these types of relevant details to allow for sorting, coding, and analysis across groups (Neergaard et al., 2009; Willis et al., 2016).

Next, we created tables by database, listing each participant and relevant factors that influenced their classifications as a completer or non-completer (Miles & Huberman, 1994). Essentially, we combined our initial classifications of completer/non-completer by dataset with excerpts from the narrative summaries that were relevant to the quantitative metrics. We then sought themes to explain the classifications. To do this, we read through the table seeking themes across groups (Willis et al., 2016). Because we were completing a QD analysis, this was a fairly straightforward process. We sorted the coded data from the narrative summaries grouping similar factual experiences and objective influences (Kim et al., 2017). For instance, it quickly became apparent that participants were classified as non-completers across datasets because they transferred from the community college to a university prior to completing their Associate degree. Other themes were slightly more complex but generally we stayed true to QD and the presentation of facts by participants (Savin-Baden & Howell Major, 2012).

Once we had our tentative themes to explain the quantitative classifications, we revisited the coded data and full narrative summaries to ensure our reporting was “data-near” and that our themes accurately reflected the participants’ experiences (Sandelowski, 2010, p. 78). Our goal was to both document the quantitative classifications and to gain new insights based on the participants’ point of view (Asbjoern Neergaard et al., 2009). Per QD, our interpretation of the data is limited, remaining at a surface level to report the realities of participants’ timelines (Sandelowski, 2001). However, we move beyond the description level to report on both the classifications and themes across groups to explain factors that impacted the classifications and identify relevant implications for policy and practice.
Findings

We begin the findings section detailing how participants would be classified via the three major quantitative datasets, NELS88, BPS, and IPEDS. Next, we explore the reasons participants would be classified as completers or non-completers.

Student & Institutional Classifications

We classified participants using the quantitative measures as completers and non-completers (Table 1). Participants would be classified via NELS88 as follows: Associate degree completers (n=6); Associate degree non-completers (n=5); Bachelor’s degree completers (n=7); and Bachelor’s degree non-completers (n=4). Two students who did not attend grade school or high school in the U.S. would not be included in the NELS88. All of the participants in this study would be classified in the BPS dataset in the following way: Associate degree completers (n=7); Associate degree non-completers (n=6); Bachelor’s degree completers (n=7); and Bachelor’s degree non-completers (n=6). Since the IPEDS institutional graduation rate only considers credentials completed at the institution within three years for first-time, full-time students, the participants would be classified as follows: completers (n=5); non-completers (n=6); not included (n=2). The IPEDS outcome measures would classify all of the participants in the following manner: completers (n=8) and non-completers (n=5).

Participants Classified as Completers

We developed two themes to explain why students were classified as completers (a) participants fit a traditional frame and (b) participants had adequate supports. A minority of participants (n=4) were classified as completers across all datasets. Caneron Erickson, and Marie most closely fit the commonly accepted traditional student definition. They completed their studies at the community college and university within two years and four years respectively. Marie explained her motivation to pursue college:

…in the summer, I had such a great time with my girlfriends. We were goin’ into [city] all the time, and goin’ nightclubbin’. So after work we’d go out partyin’, doin’ our thing. So by August my mother said to me, “So what school have you chosen?”…I said, “I’m not gonna go to college. I think I’m gonna take a year off, and um, [pause] then I’ll figure out what I want to do. I think I’ll be a secretary.” She said, “Not in this house. You either pick a school, or you’re, gonna get your own apartment, pay your own utilities, get your own phone-- “And I got frightened. I said, “I can’t do that”…So I got on the bandwagon…

Both Paige and Jasmine completed in traditional timeframes as well. However, they faced additional challenges along their educational journeys. For instance, Paige had a child as she graduated from high school which led her to attend community college while her mother provided child care for her daughter. Paige also received Welfare assistance on and off during her studies, around the time of Welfare Reform of 1996. She:

…went back and forth…the reality is just that it’s not that easy to live on welfare so sometimes it was just like “I can’t do this anymore. I got to get a job.” And then you get a job and it’s like, “I can’t do this anymore I have to go (laughs)...”
| Pseudonym     | NELS Associate | NELS Bachelor | BPS Associate | BPS Bachelor | IPEDS GR | IPEDS OM |
|--------------|----------------|--------------|--------------|--------------|----------|----------|
| Shannon      | Completer      | Non-completer| Completer    | Non-completer| Non-completer| Completer |
| Becky        | Non-completer  | Completer    | Non-completer| Completer    | Non-completer| Non-completer |
| Ruby         | Completer      | Completer    | Completer    | Non-completer| Completer | Completer |
| Jiyun        | Non-completer  | Non-completer| Non-completer| Completer    | Non-completer| Non-completer |
| Tim          | Not included   | Not included | Non-completer| Non-completer| Non-completer| Non-completer |
| Katherine    | Non-completer  | Completer    | Non-completer| Completer    | Not included| Non-completer |
| J            | Not included   | Not included | Non-completer| Non-completer| Not included| Completer |
| Paige        | Completer      | Completer    | Completer    | Completer    | Completer | Completer |
| Karen        | Non-completer  | Non-completer| Completer    | Non-completer| Non-completer| Completer |
| Caneron Erickson | Completer | Completer    | Completer    | Completer    | Completer | Completer |
| Emma         | Non-completer  | Non-completer| Non-completer| Non-completer| Non-completer| Non-completer |
| Marie        | Completer      | Completer    | Completer    | Completer    | Completer | Completer |
| Jasmine      | Completer      | Completer    | Completer    | Completer    | Completer | Completer |
Despite graduating in the top 10% of her high school, Jasmine’s options for post-secondary education were limited because she did not have her immigration papers. At the time, her state allowed undocumented students to pay in state tuition, yet she thought:

I don’t know how I’m gonna pay for this. I don’t qualify for financial aid, as somebody who’s undocumented, so I guess, let’s see if family could help me…I was lucky enough that at the time, my father did help. Um, and it was cheap enough that he was able to help. So I think that’s what saved me, too.

Participants who would be classified as completers demonstrated great resiliency to overcome structural barriers to complete their studies within the prescribed timelines. They also more commonly fit the traditional student definition not only in age, but because their families were able to help support them.

**Participants Classified as Non-Completers**

We developed two themes for why participants were classified as non-completers (a) participants did not complete an Associate degree or (b) participants did not complete their credentials within the prescribed timeline. From the student perspective, there was not always an incentive or reason to complete the Associate degree when their goal was to complete at least a Bachelor’s degree. Jiyan explained, “They have some sort of uh placement or an agreement with uh with [state university] if you graduate with a certain um GPA [grade point average] and with a certain numbers of um credits you are automatically accepted if you apply and if you meet the criteria of course so that transition was easy.” For others like Katherine, she intended to only take summer courses and return to complete her studies at her university. When asked if other students in her classes were doing the same thing, Katherine replied, “I wanna say it was even, half and half…” The only reason a student was classified as a non-completer (n=5) in the IPEDS outcome measures expanded graduation rate was because the student left without completing an Associate degree.

The most common reason for being classified as a non-completer was because participants did not complete their studies within the prescribed timeline. This second theme, on its face, seems straightforward, but the influences linked to it are a bit more complex. Participants viewed higher education as having an open door via the community college. For instance, Tim initially attended a college for one to two semesters after high school and stopped out. He said “Nah, this isn’t for me right now.” Instead he successfully worked as a real estate agent for almost two decades. When he acquired a disability and could no longer work in real estate, he returned to the community college to gain new job skills. The open door admissions policy allowed him to return to explore new careers and complete his education with ease. Despite how quickly Tim was completing his studies as an adult, because he began his post-secondary education initially after high school, the clock ran out, rendering Tim permanently classified as a non-completer in all datasets. However, in reality, he is a second career success story.

Similarly, Emma would be classified as a non-completer because she took classes “on and off” at the community college while she worked there full-time, “so a 2-year degree…took me what, 15 years (laughs) to complete…” Emma did not see a need to rush her education. She always had an interest in learning and took classes consistently for most of her adult life as she decided what her ultimate path might be. The flexible nature of the community college allowed for this exploration without sacrificing a quality education, “when I applied myself I loved my
education there (laughs) like I learned a lot of stuff when I actually applied myself…I have no
doubt that if…if there were no community colleges I would not be here…”

Similarly, Karen did not take a traditional path, instead having to create her own way
into higher education. She “was raised in a religion that unfortunately higher education was not
allowed particularly for girls.” She initially began by taking classes that were “safe” (i.e.
horticulture, job skills). Once she began to take the social science courses, she decided to leave
her religion and continue her education. For Karen, this was a process and certainly not a
decision she made over night, but the variety of courses offered at the community college and
their open door policy provided her opportunities over many years:

I was getting older. I’m like I love it [horticulture] but do I really want to be
working outside because as I get older this is going to only last so long. So I
thought, “Alright maybe I’ll go back to [abbreviation for community college]
and again bring my computer skills up to date”…I could get away with that
(laughter)…kind of…and then I started part of it was an Associate’s degree…So
this was just a certificate and this was like, I’m actually like I’m on the edge
here with an Associate’s…I stopped as I finished my Associate’s degree…with
umm the religion…

In some cases, regardless of perceptions, students needed additional time to complete
their studies. For instance, the logistics of taking English courses for non-Native speakers
required extending participants’ educational timelines. In other cases, participants were forced
to take less classes if they could not financially afford full-time study. Both were true for J. She
explained that she had her green card when she attended the community college which meant
she could attend but did not qualify for financial aid or scholarships, “so for five years I was
working full-time and I went to school sometimes full-time sometimes like three classes…”

**Discussion**

Our research provides a valuable systematic qualitative examination of the three major
U.S. higher education quantitative databases. Our findings indicate that none of the quantitative
databases effectively captured our sample of qualitative successes and that the quantitative
metrics produce a negative and an erroneous evaluation of community colleges. Therefore, our
research adds to the mounting evidence that the U.S. quantitative datasets are inadequately and
erroneously evaluating success in higher education (Covarrubias et al., 2018; Malina et al.,
2011; Mullings, 2000; Ocean et al., 2018).

Additionally, the continued dominance of the university and traditional student model
in the quantitative metrics punishes community colleges for their open door policy. Time was
the most common factor to classify participants as non-completers inaccurately. In reality,
participants completed their undergraduate studies but not within the prescribed timetables.
Some participants who would be classified as non-completers were simply exercising the
flexibility the open door policy afforded them at the community college. The community
college provided participants the autonomy to take a break from attending or change their
course of study (i.e., from full-time to part-time) without having to ask permission. Even the
expanded time frames continue to ignore the open door policy of community colleges as well
as the complexities of real life. Some participants were forced to slow the pace of their studies
due to financial constraints or extend their studies to take foundational English courses. The
quantitative measures need to include metrics that capture or adjust for community colleges,
who have an open door policy and serve a diverse student population who are more likely to
live in low-income environments.
Additionally, we did not find evidence that participants lost momentum or were unclear on how their course load would impact their graduation date. To the contrary, participants’ narratives document their hard work, dedication to their education, and determined natures. Taking a break from their studies, pacing their education, and adjusting as life circumstances changed were all necessities and helped participants ultimately complete their graduate studies at high ranking graduate social work programs.

Our results indicate that a classist perspective is embedded within the quantitative measures continuing to focus on traditional student paths and a university model. Students who fit the traditional mold were most likely to be classified as completers across datasets. The recently expanded timelines in the IPEDS outcome measures seem to be an improvement capturing more participants as completers than the other databases. However, the changes appear insufficient leaving 5 of the 13 participants erroneously classified as non-completers. It is worth noting all five of these students did not complete their Associate degree. Consequently, our findings suggest that community colleges are penalized when their students transfer prior to completing an educational credential. In some cases, like Jiyen noted, articulation agreements between institutions may allow students to transfer prior to degree completion and there may be little incentive from a student perspective to complete an Associate degree prior to transfer. Similar to previous research, we found adjustments to quantitative metrics are needed to avoid financially penalizing community colleges via performance-based funding (Bailey et al., 2015; McKinney & Serra Hagedorn, 2017).

Limitations

As with all pilot studies, this research has limitations. To begin, this research was conducted in 2011 which is a limitation. However, the educational system has not changed dramatically since then and the current quantitative classification criteria were used. In other words, while the student experiences are from a previous time period, the criteria used to judge their completion status are actively used today and worthy of critique. Additionally, while the focus on high ranking graduate social work programs, provides targeted findings, this also overlooks the experiences of individuals in a more diverse range of fields. Future research can expand the pool of participants to gain new insights on the quantitative datasets and experiences of community college students in order to produce more generalizable results.

Implications

This research is of paramount importance to the U.S. higher education community. The current inadequate and classist quantitative metrics are dominating the evaluation conversation. This hinders practical improvement, skewing even descriptive statistics. Additional qualitative description research is needed to further evaluate the quantitative metrics and to construct new quantitative metrics that accurately reflect the realities on the ground at community colleges and in students’ lives. Our work also reinforces the calls for qualitative research in higher education evaluation. We found participants who would be classified as non-completers did not complete an Associate degree or they did not earn their credential in the prescribed timelines. Participants’ pace could be voluntarily slow or inconsistent, viewing higher education as a perpetual opportunity via the community college open door policy. In other cases, participants were forced to slow their pace due to financial barriers. Regardless, participants interpreted the open door of the community college to mean that higher education is always an option without pressure to complete a degree at any one time. These quantitatively overlooked findings contribute to a more informed evaluation of higher education.
Ultimately, as institutional outcomes are under increased scrutiny and funding is linked to institutional performance, the community college should not be penalized for their mission or because they serve individuals living in poverty. The race to degree completion is in direct contradiction to the open door mission of the community college, yet this incongruity is largely ignored. Additionally, it is troubling that leaders, researchers, and policy makers in higher education would push students to complete their educations for the sake of arbitrary timelines, institutional efficiency, and flawed statistics devaluing the human experience, learning, and community engagement. Community college leaders, researchers, advocates, and allies can use this research as further evidence that there is a need to change how higher education outcomes are measured and evaluated.

Community colleges provide an important service to our communities that is overlooked, distorted, and devalued. They need to be thoughtfully incorporated into the quantitative evaluation metrics, and the metrics thoughtfully need to reflect related policies (e.g., articulation agreements). Only then can we gather accurate data to evaluate community colleges’ successes and limitations, enabling us to make decisions based on sound science. Until a more holistic view of data is embraced by federal and state policymakers, the open door to higher education will continue to close gradually.

References

American Association of Community Colleges. (2019). AACC fast facts 2019. https://www.aacc.nche.edu/wp-content/uploads/2019/03/AACC-2019-Fact-Sheet-1.pdf

Asbjoern Neergaard, M., Olesen, F., Sand Andersen, R., & Sondergaard, J. (2009). Qualitative description -- the poor cousin of health research? BMC Medical Research Methodology, 9, 52–56. https://doi-org.proxy-wcupa.klnpa.org/10.1186/1471-2288-9-52

Atieno, O. P. (2009). An analysis of the strengths and limitation of qualitative and quantitative research paradigms. Problems of Education in the 21st Century, 13, 13-18. http://journals.indexcopernicus.com/abstract.php?icid=888498

Bailey, T. R., Jaggars, S. S., & Jenkins, D. (2015). Redesigning America’s community colleges: A clearer path to student success. Cambridge, MA: Harvard University Press.

Baldwin Grossman, J., Quint, J., Gingrich, J., Cerna, O., Diamond, J., Levine, A., & Willard, J. (2015). Changing community colleges: Early lessons from completion by design. Lumina Foundation. https://www.luminafoundation.org/wp-content/uploads/2017/08/changing-community-colleges.pdf

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: a tool to enhance trustworthiness or merely a nod to validation? Qualitative Health Research, 26(13), 1802–1811. https://doi.org/10.1177/1049732316654870

Borden, V.M.H. (2004). Accommodating student swirl: When traditional students are no longer the tradition. Change, 36(2), 10-17. doi:10.1080/00091380409604963

Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. Global Qualitative Nursing Research, 4, 1-8. https://doi.org/10.1177%2F2333393617742282

Bragg, D. D. (2001). Community college access, mission, and outcomes: Considering intriguing intersections and challenges. Peabody Journal of Education, 76(1), 93-116. http://www.jstor.org/stable/1493007

Bragg, D. D., & Durham, B. (2012). Perspectives on access and equity in the era of (community) college completion. Community College Review, 40(2), 106-125. doi:10.1177/0091552112444724

Brint, S., & Karabel, J. (1989). The diverted dream. Oxford University Press.
Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. H. Elder, Jr., & K. Lüscher (Eds.), Examining lives in context: Perspectives on the ecology of human development (pp. 619–647). American Psychological Association. https://doi.org/10.1037/10176-018

Chafe, R. (2017). The value of qualitative description in health services and policy research. *Healthcare Policy, 12*(3), 12–18. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5344360/?tool=pmcentrez

Cohen, A. M., Brawer, F. B., & Kisker, C. B. (2013). The American community college (6th ed.). Jossey-Bass.

Cole, D., Kitchen, J. A., & Kezar, A. (2019). Examining a comprehensive college transition program: An account of iterative mixed methods longitudinal survey design. *Research in Higher Education, 60*(3), 392–413. https://doi.org/10.1007/s11162-018-9515-1

College Scorecard Data. (2018). https://collegescorecard.ed.gov/data/

Complete College America. (n.d.). Homepage. https://completecollege.org/

Covarrubias, A., Nava, P. E., Lara, A., Burciaga, R., Vélez, V. N., & Solorzano, D. G. (2018). Critical race quantitative intersections: a testimonio analysis. *Race Ethnicity and Education, 21*(2), 253-273. https://doi.org/10.1080/13613324.2017.1377412

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Sage.

Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research*. Sage.

Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2002). Advanced mixed methods research designs. In A. M. Tashakkori & C. B. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (1st ed., pp. 209-240). Sage.

Crisp, G., & Delgado, C. (2014). The impact of developmental education on community college persistence and vertical transfer. *Community College Review, 42*(2), 99–117. https://doi.org/10.1177/0091552113516488

Dowd, A. C., Cheslock, J., & Melguizo, T. (2008). Transfer access from community colleges and the distribution of elite higher education. *Journal of Higher Education, 79*(4), 442-472. https://doi.org/10.1080/00221546.2008.11772110

Doyle, W. R. (2009). The effect of community college enrollment on bachelor’s degree completion. *Economics of Education Review, 28*(2), 199–206. https://doi.org/10.1016/j.econedurev.2008.01.006

European University Institute. (2019). *Micro socioeconomic data*. https://www.eui.eu/Research/Library/ResearchGuides/Economics/Statistics/MicroDataSet

Fay, B. (1987). *Critical social science: Liberation and its limits*. Cornell University Press.

Fernald, D. H., & Duclos, C. W. (2005). Enhance your team-based qualitative research. *Annals of Family Medicine, 3*(4), 360-364. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1466909/

Fuller, C. (2011). *The history and origins of survey items for the integrated postsecondary education data system* (NPEC 2012-833). http://nces.ed.gov/pubsearch.

Gándara, D., & Rutherford, A. (2020). Completion at the expense of access? The relationship between performance-funding policies and access to public 4-year universities. *Educational Researcher, 49*(5), 321-334. https://doi.org/10.3102%2F0013189X20927386

Guzmán-Valenzuela, C., & Barnett, R. (2019). Patterns of theory use in qualitative research in higher education studies in Latin America: a geopolitical interpretation. *International Journal of Qualitative Studies in Education, 32*(5), 477-492. https://doi.org/10.1080/09518398.2019.1597213
Hazelkorn, E. (2017). *Ranking and higher education: Reframing relationships within and between states.* Centre for Global Higher Education. https://www.researchcghe.org/publications/working-paper/rankings-and-higher-education-reframing-relationships-within-and-between-states/

Institute for Higher Education Policy. (2015). *National data initiatives: Integrated Postsecondary Education Data System (IPEDS).* http://www.ihep.org/sites/default/files/uploads/postsecdata/docs/resources/ipeds_final.pdf

Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of qualitative descriptive studies: a systematic review. *Research in Nursing & Health,* 40(1), 23-42. https://dx.doi.org/10.1002%2Fnur.21768

Kinser, K., & Deitchman, J. (2008). Tenacious persisters: Returning adult students in higher education. *Journal of College Student Retention,* 9(1), 75-94. doi: 10.2190/W143-56H0-6181-7670

Lambert, V., & Lambert, C. (2012). Qualitative descriptive research: An acceptable design. *Pacific Rim International Journal of Nursing Research,* 16(4), 255-256. https://www.tci-thaijo.org/index.php/PRIJNR/article/view/5805

Lanford, M. (2020). Institutional competition through performance funding: A catalyst or hindrance to teaching and learning? *Educational Philosophy and Theory.* https://doi.org/10.1080/00131857.2020.1783246

Lederman, D. (2017, October 12). The new, improved IPEDS. *Inside Higher Ed.* https://www.insidehighered.com/news/2017/10/12/new-federal-higher-ed-outcome-measures-count-part-time-adult-students

Li, A. Y. (2019). *Lessons learned: A case study of performance funding in higher education.* https://www.thirdway.org/report/lessons-learned-a-case-study-of-performance-funding-in-higher-education

Lockwood Reynolds, C. (2012). Where to attend? Estimating the effects of beginning college at a two-year institution. *Economics of Education Review,* 31(4), 345-362. https://doi.org/10.1016/j.econedurev.2011.12.001.

Malina, M. A., Nørreklit, H. S. O., & Selto, F. H. (2011). Lessons learned: advantages and disadvantages of mixed method research. *Qualitative Research in Accounting & Management,* 8(1), 59-71. https://doi.org/10.1108/1176609111124702

McKinney, L., & Serra Hagedorn, L. (2017). Performance-Based funding for community colleges: are colleges disadvantaged by serving the most disadvantaged students? *The Journal of Higher Education,* 88(2), 159-182. https://doi.org/10.1080/00221546.2016.1243948

Meinefeld, W. (2004). Hypotheses and prior knowledge in qualitative research. In U. Flick, E. von Kardoff, & I. Steinke (Eds.), *A companion to qualitative research* (pp. 153–158). Thousand Oaks, CA: Sage.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). SAGE.

Monaghan, D. B., & Attewell, P. (2015). The community college route to the bachelor’s degree. *Educational Evaluation and Policy Analysis,* 37(1), 70–91. https://doi.org/10.3102/0162373714521865

Morse, R., & Brooks, E. (2020). *How U.S. News calculated the 2021 best college rankings.* https://www.usnews.com/education/best-colleges/articles/how-us-news-calculated-the-rankings

Mullings, L. (2000). African-American women making themselves: Notes on the role of Black feminist research. *Souls,* 2(4), 18-29. https://doi.org/10.1080/109999400009362233

National Center for Education Statistics. (2016). *IPEDS Graduation Rates.*
http://www.sacmeq.org/
Stanton-Salazar, R. D. (1997). A social capital framework for understanding the socialization of racial minority children and youths. *Harvard Educational Review, 67*(1) 1-41. http://hepg.metapress.com/content/140676G74018U73K

Sullivan-Bolyai, S., Bova, C., & Harper, D. (2005). Developing and refining interventions in persons with health disparities: The use of Qualitative Description. *Nursing Outlook, 53*(3), 127-133. https://doi.org/10.1016/j.outlook.2005.03.005

Stuart, R. (2013, October 15). Under IPEDS measures, some graduates and transfers still considered dropouts. *Diverse Issues in Education*. https://diverseeducation.com/article/56744/

Tierney, W. G., & Clemens, R. F. (2011). Qualitative research and public policy: The challenges of relevance and trustworthiness. In J. C. Smart & M. B. Paulsen (Eds.), *Higher education: Handbook of theory and research* (pp. 57-83). Springer.

Way, N. (1998). *Everyday courage: The lives and stories of urban teenagers*. New York University Press.

Willis, D. G., Sullivan-Bolyai, S., Knafl, K., & Cohen, M. Z. (2016). Distinguishing features and similarities between descriptive phenomenological and qualitative description research. *Western Journal of Nursing Research, 38*(9), 1185–1204. https://doi.org/10.1177/0193945916645499

The World Bank. (n.d.). *Education Statistics (EdStats)*. https://datatopics.worldbank.org/education/

United Nations Educational, Scientific and Cultural Organization. (2017). *Educational assessment*. http://www.unesco.org/new/en/santiago/education/education-assessment-llce/

Author Note

Mia Ocean is an Assistant Professor of Graduate Social Work at West Chester University of Pennsylvania. Her research focuses on anti-oppressive methods and access and equity in higher education. She can be contacted directly at mocean@wcupa.edu.

Karon Hicks is a high school Social Worker with the City of Philadelphia School District in Philadelphia, PA. Her research interests include racial representation and economic disparities in higher education. Correspondence regarding this article can be addressed directly to karon.hicks20@gmail.com.

Acknowledgements: We want to thank the participants in the research for sharing their stories, experiences, and expertise.

Copyright 2021: Mia Ocean, Karon T. Hicks, and Nova Southeastern University.

Article Citation

Ocean, M., & Hicks, K. T. (2021). A qualitative description investigation of U.S. higher education quantitative datasets. *The Qualitative Report, 26*(3), 696-713. https://doi.org/10.46743/2160-3715/2021.4397