Experiences of Earned Success: Community College Students' Shifts in College Confidence

Susan Bickerstaff Teachers College, Columbia University Melissa Barragan University of California, Irvine Zawadi Rucks-Ahidiana University of California, Berkeley

Confidence and related constructs such as self-efficacy have been previously identified as important to college student persistence and performance (e.g., Cox, 2009; Wood & Turner, 2011), but existing research gives little indication of how confidence is shaped by students' day-to-day interactions in class and on campus. Using data from nearly 100 interviews of community college students attending three colleges, this paper examines students' descriptions of their confidence upon entering college and the shifts in confidence they experienced in their first few semesters. Findings reveal that student confidence is continually shifting as a result of interactions with peers, faculty, and others. The analysis demonstrates how academic confidence can impact student motivation, commitment to academic pursuits, and behaviors associated with success. This paper identifies the nature of experiences that positively reinforce student confidence, events that we term experiences of earned success. We use these data to identify a set of approaches that instructors and other post-secondary educational professionals can employ to positively influence student confidence and improve student success.

To improve low rates of credential attainment in college, individual schools as well as a number of national organizations have developed a range of initiatives focused on increasing rates of college completion and student success. Efforts to align high college curricula school and and improve developmental (or remedial) course offerings are among the most popular approaches to improving student outcomes. While academic preparation is undoubtedly important to student performance in college, research has also pointed to the impact of nonacademic and non-cognitive factors such as social integration, comfort with the cultural and institutional norms of college, and student motivation and confidence (e.g., Astin, 1993; O'Gara, Karp, & Hughes, 2008; Tinto, 1987). Although the importance of these non-academic factors in college completion and success has been well established, questions remain about the best ways to structure the college environment so as to foster students' sense of belonging and promote behaviors that are associated with success. This paper addresses this gap in the literature by providing evidence of students' academic confidence upon entry to community college and what influenced changes in their academic confidence during the early stages of community college.

We define academic confidence as students' certainty in their ability to meet the academic and social demands of college (Sander & Sanders, 2006). Confidence and related constructs such as self-efficacy have been previously identified as important to student performance (e.g., Cox, 2009; Wood & Turner, 2011), but existing research gives little indication of how confidence is shaped by the day-to-day interactions students experience in class and on campus. Using data from 97 semi-structured interviews of community college students attending three colleges, this

paper examines students' perceptions of their confidence upon entering college, the types of shifts in confidence they experienced in their first few semesters, and the mechanisms that promoted such shifts. Based on our analysis, we present possible strategies for structuring the classroom and other on-campus environments that can foster experiences of earned success and ultimately enhance students' commitment to their academic pursuits.

Perspectives from the Literature: Academic Confidence and Student Performance

Social psychologists and cultural sociologists have long suggested that students' self-perceptions, as shaped by social interaction and personal history, are related to behaviors associated with academic performance. In particular, research has found that self-efficacy and confidence, or the belief in one's capabilities to organize and successfully complete a task, are tied in important ways to a student's aspirations, academic identity, motivation, achievement, and ultimately persistence (e.g., Bandura, 1993; Cech, Rubineau, Silbey, & Seron, 2011; Gore, 2006; Multon, Brown & Lent, 1991). Specifically, studies have found that self-efficacy can facilitate positive learning habits, such as deeper cognitive processing and stronger willingness to tackle challenging tasks (e.g., Bandura, 1997; Liem, Lau, & Nie, 2008). Similarly, psychologists have asserted that if a student does not expect to achieve success or cannot reconcile future goals and current obstacles, he or she is less likely to engage in positive, selfregulatory behaviors conducive to successful academic performance (e.g., Duckworth, Grant, Loew, Oettingen & Gollwitzer, 2011; Oyserman, Bybee & Terry, 2006). This research therefore demonstrates

the powerful role of self-perception in conditioning a student's willigness and even ability to succeed.

In addition to these cognitive processes, research suggests a range of other external factors that can shape the academic confidence of postsecondary students and subsequently affect their outcomes and success. For example, dominant cultural narratives and persistently low expectations of certain groups of students, particularly working class students and students of color, are associated with poor academic performance (Steele & Aronson, 1995). These expectations have been shown to shape academic identity, the dimension of self-concept tied to academic motivation, achievement, and future expectations (see Graham, 1989; Welch & Hodges, 1997). For example, Howard (2003) found that parental influences, the perceptions of teachers and counselors, and perceptions of college influenced the academic identities of black high school students. Likewise, research suggests that students' general perceptions about intelligence and learning, as well as previous experiences with success and failure, are associated with effort and achievement (Dweck, 2006; Gurin & Gurin, 1970). Knowledge of, and comfort with, the norms and expectations of educational institutions have been identified as an important component of a successful transition to college (Leese, 2010).

Importantly, research indicates that self-efficacy is contextual and tied to specific situations or tasks. Bandura (1997) identifies "enactive experiences" as a central influence on self-efficacy. When individuals interpret the results of their efforts on a particular task as successful, their sense of competency in that area is enhanced. research has demonstrated the importance of academic and interpersonal validation for student persistence and performance (e.g., Rendón, 1994). For example, one study found that students' anxiety, uncertainty about their belonging on campus, and beliefs about the nature of learning were correlated with student engagement and performance in math (Yeager, Muhich, & Gray, 2011). Yet a range of studies suggest that self-efficacy, academic confidence, and related constructs are malleable, particularly in education settings (e.g., Aronson, Fried & Good, 2002; Paunesku et al., 2015; Walton & Cohen, 2011).

The high concentration of nontraditional college students in community colleges and the persistently low transfer and graduation rates in community colleges (Snyder & Dillow, 2012) makes research on how to help this population of students build a connection and commitment to college of particular importance (Pascarella & Terenzini, 1998). The small subset of the current literature that focuses specifically on community colleges suggests that community college students may experience disjunctures between home and school and may have less access to

information about how to be successful in college (e.g., Elizondo, Allen, & Ceia, 2012: Jehangir, 2009: Rendón, 2002). Yet we still have limited understanding about community college students' confidence and how that confidence is influenced by experiences in college. Scholarship suggests that community colleges play a unique role in shaping students' expectations. For example, a longstanding theoretical perspective on community colleges suggests that they are sites in which students experience a "cooling out" of their educational aspirations (Clark, 1960). Clark (1960) argued that the open-access nature of community colleges, their dual mission as transfer and vocational institutions, and the limited resources available to students result in decreases in student ambitions. Specifically, students may assume blame for the obstacles they encounter that can deter them from focusing more intently on their academic pursuits. Researchers have subsequently contested this theory, with some arguing that many community college students' aspirations are "warmed up" so that students who had not previously planned to earn a degree subsequently aspire to do so (Alexander, Bozick, & Entwisle, 2008; Rosenbaum, Deil-Amen, & Person, 2006). Nevertheless, scholars on both sides of this debate appear to maintain that students' experiences interacting with faculty and with others in their institution have an important impact on student expectations, motivation, and goals, although how these interactions contribute to confidence has not been clearly articulated.

While the literature points to confidence as a potentially important catalyst for postsecondary success rates, few studies have explicitly explored the academic confidence of community college students. One exception is Cox (2009), who demonstrated the ways in which students' lack of confidence is connected to self-protective avoidance strategies that "prevent full commitment to the role of college student" (p. 77) and how such a lack of confidence can lead to attrition and poor performance. Importantly, she argued that "certain students require a specific kind of validating academic environment to overcome their fear of failure and complete their coursework" (p. 78). Unfortunately, research tells us little about what this environment might look like for community college students.

This paper adds to the literature on college students' confidence in two ways. First, it demonstrates the fluidity of college confidence and the shifts students experience during their first few semesters in college. Second, it demonstrates how students' interactions with the college environment—both within and outside the classroom—influence academic confidence. The following section details the study's methodological strategies.

Methods and Data

Drawing on a larger study of student success courses, this paper uses data from 97 semi-structured

interviews with students at three community colleges in a single state. Colleges were purposefully selected to represent urban, rural and suburban areas of the state and to create a student sample roughly representative of the state's community college population as a whole. Student success courses provide new community college students with basic information about going to college, including a review of non-academic skills (e.g., note taking, study skills, and time management) and available student services (e.g., tutoring, library services, and career and academic planning). Most incoming students are required to take these courses as a graduation requirement. In order to maximize the course's potential to influence student success, colleges also strongly encourage students to take the course within their first 15 credits.

We conducted semi-structured interviews with students who had recently taken or were currently enrolled in a student success course, most of whom were in their first semester of college. In addition to asking about their student success courses, the interview protocol included questions about students' expectations of college before enrolling, their college experiences to date, and how those experiences resulted in changes in their perceptions of college. Relevant interview protocol questions for this analysis include:

- What did you know about how to be successful in college before you enrolled here?
- Have you confronted any challenges in your classes this semester? If yes, tell me about them.
- Have you had any successes in your classes this semester? If yes, tell me about them.
- What is the most important thing you learned about yourself since starting college?

Students were recruited to participate in interviews in their student success courses and via advertisements on campus, and they were compensated \$25 for their participation. Just over half of interviewees were women, 35 percent were students of color, and 55 percent were between 18 and 20 years old at the time of the interview. Most interviews lasted approximately 40 minutes and were audio-recorded and transcribed for analysis.

The construct of academic confidence emerged inductively from a thematic analysis of the dataset; in response, we established a series of codes to capture student confidence and the factors that impact it. Using NVivo qualitative data analysis software, the research team coded the interview data for instances in which students described their confidence. Codes were established during a recursive process of test coding during which researchers coded a subset of transcripts, collectively reviewed the coding, and refined the code list and code definitions. For the purposes of coding, we defined confidence as: "Students describe their

certainty in their ability to be a good student, get good grades, persist, and/or complete college successfully. This may refer to one class or to college more generally and could include statements such as, "It's easy," or, "I was nervous." We sorted these references into descriptions of "past" and "present" confidence and then coded for factors that appeared to interact with students' confidence, such as knowledge about college, goals and plans, past experience and motivation, and shifts in confidence.

Coding validity was achieved through a number of validity checks whereby two researchers coded every tenth transcript and a third researcher reviewed the coding. These checks were used to identify discrepanciess and further refine the coding instrument. The research team met weekly to discuss the results of these checks, questions about specific passages and codes, and emergent findings.

The following section begins with a brief introduction of the two confidence categories that emerged within the data: students who entered college with confidence, whom we refer to as self-assured students, and those who were apprehensive about their collegiate endeavors upon entry. We then describe two types of shifts that emerged most prominently in our data and what instigated those changes. The first type of shift is rooted in experiences of destabilization that led students to reevaluate their understanding of what it means to be a college student, which in some cases undermined students' confidence. The second type of shift resulted from an experience of earned success, which was linked to positive shifts in confidence, enhanced motivation, and more robust academic identities.

For clarity and ease of language in this paper we use the terms apprehensive and self-assured in ways that might seem to imply that student confidence is static (e.g., we use the term self-assured students). However, the data suggest that confidence is highly dynamic and is related to particular tasks and subject areas. Many individual students exhibited both apprehension and self-assurance, as they might have been confident about writing but unconfident about speaking up in class. This paper explicitly highlights what contributes to these dynamic shifts during the early stages of a student's collegiate endeavors.

College Confidence at Entry

In order to trace how student confidence shifts during their early college experiences, we examined how confidence developed for students entering with two types of confidence: apprehensive and self-assured. Apprehensive students described a lack of academic confidence upon entry to school. Self-assured students, by contrast, reported feeling confident at the outset of their college careers. For both groups, their self-described confidence was tied to both their previous

educational experiences and their expectations of community college, as described further below.

Apprehensive Students: "I Knew Nothing and I Had to Learn a Lot Really Fast"

Our analysis of students' apprehension indicates that their low confidence was most often associated with their expectations of how they would perform in college, which was often shaped by information they received from teachers, friends, and others. Many reported receiving warnings about their level of preparedness for college-level work. For instance, one interviewee said: "High school teachers give you a skewed image of college. ... They say, 'You're not going to be ready for college. You're not going to be ready." Another student explained: "Everybody thinks college teachers aren't going to be worried about you...Just the overall review of college is 'You're on your own." The message conveyed to these students is, thus, to expect disjuncture and possibly failure despite their previous track record or best efforts.

Specific sources of student apprehension included concerns about technology, academic preparation, study skills, and navigating the college environment. For example, one returning student expressed concern about the technological demands of attending college:

I looked at my age and I looked at the technology, the computer, which I know very little about. ... Then I looked at how far advanced the other kids were coming from high school, those that were already in school and had been in school for a year or so, and how would I match to that?

Students also voiced concerns about how well previous academic experiences had prepared them to take on the demands of college. For example, one student described her experience in an English class her first semester: "They are talking about different types of outlines, and I'm trying to remember if we did outlines [in high school]." Some students struggled to understand the non-academic landscape, such as figuring out registration and transfer requirements: "I got no guidance. Like I didn't know how to apply for college classes. I had never even heard of [transfer] agreements. I knew nothing and I had to learn a lot really fast." Feeling unprepared for the college environment sometimes led apprehensive students to question their decision to enroll in college: "I was scared to death when I came back. ... [I was] nervous. Did I make the right decision?"

Overall, apprehensive students exhibited a lack of confidence that may be associated with a tenuous commitment to college. Prior research suggests that this can translate into behaviors that undermine success, as students expend less effort on tasks they feel more likely to fail (e.g.,

Cox, 2009; Yeager et al., 2011). As we demonstrate shortly, this cycle proved true for students in our sample as well.

Self-Assured Students: "I Am Going to be Successful Because I Already Have Been"

Students who were self-assured had high expectations for achievement or success in one or more dimensions of college. They described their academic identities as positive, in part because they performed well in previous educational contexts: "I always think of myself as being a really smart somebody. ... I got through high school pretty good, and I studied, and I would just look at the material, do the work, and that was it." In many cases, students connected their sense of confidence to their demonstrated ability to manage time and meet deadlines, both within and outside the classroom: "I've never been a procrastinator. If I'm doing something, I want to get it done right then."

Based on these prior experiences, some self-assured students demonstrated an awareness of their academic weaknesses. In fact, some also described an awareness of how to manage their weaknesses. This student noted that while she was not strong in math, she had identified strategies to ensure that she would receive an acceptable grade in her math courses:

Math is a touchy thing with me ... but I think that it can be overcome as far as I just need to take time to study and get that tutor. I think that ... it will just work itself out in the end.

While the student quoted above described a specific subject area challenge, this also emerged as self-assured students talked about the broader challenge of completing college. For example, one student noted, "It's just going out and [getting] the degree. You have to start at the bottom and work your way up." More generally, the data suggested that self-assured students approached the obstacles of college with ambition rather than fear. Thus, while some expected college to be challenging, like apprehensive students did, they believed in their own ability to succeed and address challenges as they arose.

While some students acknowledged what aspects of college might present a challenge, other self-assured students thought that college would be easy. In some cases, this was informed by stereotypes of community colleges: "I expected it to be like '13th grade' like they said. I thought it was going to be a lot more like high school than college." This misguided expectation, in turn, fostered a sense that students did not need to change their academic habits and behaviors. For example, some students cited their ability to "get by" in high school as a reason for entering college confidently: "All through high school I've been one of the kind of

students that's kind of kicked back, didn't really do my homework, and I still did really good because I'm really good at like tests and absorbing information." Taken together, this lack of information about the expectations of college, combined with prior academic success, contributed to some students' expectations that they would succeed in college with little effort.

Both the student who believes she can be successful without doing homework and the student who is too fearful to begin an assignment need to recalibrate their expectations of college and of themselves to achieve success. Many students in our study described feelings of apprehension and self-assurance as their confidence varied across subject areas and shifted over time. As detailed next, close analysis of these shifts provides insight into how colleges contribute to changes in students' confidence during their first few semesters.

Shifts in Confidence

Although the students described above had different previous educational experiences and differing expectations of college prior to enrollment, almost all reported one or more shifts in their college confidence as their understandings of college and of themselves as learners evolved. These shifts were related to specific skills or content areas and we classify them as experiences of destabilization or experiences of earned success. See Table 1 for a summary.

Experiences of Destabilization: "It's Been a Wake-Up Call Actually."

Most students in this study reported that they expected college to be challenging and that difficult course material coupled with support provided motivation to succeed. As one student explained, "It is hard, but I like being challenged a little bit." However, for some students, early college experiences destabilized their confidence in areas in which students were both previously self-assured and previously insecure. These shifts revealed the ways in which college was more challenging than expected, as well as the ways in which the student was less prepared than expected. Our findings suggest that experiences of destabilization can result in either positive changes to academic behavior or negative changes in students' confidence. Positive changes often occurred when students could readily identify the behavior that led to the experience of destabilization, which could emerge when a destabilizing experience was followed by an experience of earned success. In contrast, negative shifts manifested when students were unable to identify the underlying problem.

Most experiences of destabilization emerged from interactions with instructors through negative feedback students received on their work. In particular, students

described shifts in expectations when they received low grades on assignments. As one student recounted, "I came to this [college], and I was still in that [high school] mentality. And it's like, 'Whoa, I'm failing.'" Low grades often led students to assess their work habits and realize that college required different academic strategies than their prior educational experiences: "You gotta do your homework and your class work, or you're not going to pass." These types of realizations were particularly prevalent amongst students who passed their high school courses with little effort or difficulty. Exposure to college level expectations also influenced how students completed homework and engaged with lectures. This student described how his perceptions of reading and studying were changing:

I didn't know that there was so much in-depth [work] that comes with reading; [you cannot] just read the material and listen and go about your business. But it's so much more—you have to understand your reading, you've got to know what you're reading about.

While these statements reflect the vague and misinformed understandings of college that were common among our interviewees, they underscore the ways in which poor academic performance catalyzed important realizations for some students.

Low grades and poor feedback from professors often provided a "wake up call" of the expectations for college level work, including the type of effort and skills required to succeed in college. Students who experienced this type of destabilization, like this student, often noted things like, "I can't be as lazy as I was in high school." Some of these "wake-up calls" were described by students in conjunction with newly acquired academic behaviors or positive selfreflection about the attitudes and habits required for success. For example, a student who struggled early in college reported, "When I first went to college, I thought it was a joke and didn't really care about it, but I realized I had to actually sit down and think about it and apply myself and work it out." Students who were able to identify the skills and habits needed to get good grades and receive positive feedback reported making changes that led to feeling more engaged and committed to working hard in college. Their understanding of the habits and effort necessary to succeed translated these destabilizing experiences to subsequent experiences of earned success.

While students with clear direction out of destabilization appear to benefit from the experience, students with less clarity around how to address poor performance experienced declining confidence and increased apprehension. This student realized he was struggling early on in the semester, but never identified

Table 1
Shifts in Community College Student Confidence

Shift	Definition	Illustrative Quote	Outcome
Experiences of Destabilization	A dimension of college is perceived to be more challenging than expected.	"I didn't know there was so much in-depth [work] that comes with reading."	If supported, may result in changes to positive academic behaviors. If not, can result in decreased confidence and motivation
Experiences of Earned Success	Students receive tangible evidence about their potential in an identified area of concern.	"I definitely found out that I can actually get up and do stuff. I don't have to wait until the last minute."	Confidence in the area, motivation, and aspirations may increase.

how to address his problem with time management in time to recover:

It started sinking in after the first week actually. I saw all this work that was not getting done and then it started piling up and they wouldn't take late work. They said, "This isn't high school anymore." And then it really smacked me in the face when the class was over and I saw my grade.

Other students shared a similar shifting awareness of failure without having a clear idea of how to address the problem at hand. This student realized that her habits in class were proving problematic for her performance in college: "I don't take notes, but I probably need to start doing that because I'm not doing too great in college right now, because I'm not taking notes." Yet, thus far she had not put note taking into practice, potentially due to a knowledge gap in how to do so.

For some students in our study, destabilizing experiences resulted in uncertainty about their ability to succeed. Even students who reported self-assurance when they entered college appeared vulnerable to apprehension when they interpreted failure to be the result of their own skills and abilities. For example, one student who recalled feeling initially confident about college reported increasing apprehension about his ability to succeed. This manifested in a reevaluation of his career goals:

I'm definitely starting to think more realistic now because when you first get into college, like 'I want to do this and this and this.' And you're like, 'Well I can't, I'm not really smart enough to do that ... this is really hard to do.' Like teaching is my main goal, but I have a fallback. My fallback is being a police officer ... or security guard.

Just as students who recalled apprehension upon entering college reported wavering commitment to their goals (wondering if they made the right decision in coming to college), this student reported a potential "cooling out" (Clark, 1960) of his aspirations.

Experiences of Earned Success: "So I Realized, 'Hey, I'm Actually Smart'."

The second shift in confidence we identify occurred when students received tangible evidence about their potential, which made them feel more confident about their college endeavors. These experiences of earned success reshaped students' perceptions of their own abilities, even when they coincided with realizing that college was more challenging than expected. Experiences of earned success emerged around course content, academic work habits, and the social demands of college, but regardless of their focus they shared three characteristics: they provided students with evidence of their success, resulted from students' own actions or effort, and were related to an identified area of concern or weakness. In some cases, experiences of earned success emerged from a potentially destabilizing situation that was successfully navigated. Students with both higher and lower self-assurance described experiences of earned success, suggesting that such moments can be salient even when students have stronger levels of confidence in certain domains.

Given that interviewed students were in a college preparatory course that reviewed study skills and academic habits, some students experienced earned success in applying new study skills they learned through the course:

That's when my class started to really pick up with the notes, and I was using my high school notes, and it was like it wasn't working. ... And [then, after practicing] it was like, now I can take notes in college.

In this case, the student realized she was falling behind, but she was able to apply a new technique to address the problem before it escalated to a destabilizing problem. After applying the new technique, she saw evidence of her success, which enhanced her academic confidence in note taking. Similarly, other students reported evidence of success in their efforts to manage time more effectively or to work proactively to accomplish tasks: "In high school I was the biggest procrastinator. ... So, definitely I found out that I can actually get up and do stuff. I don't have to wait until the last minute."

In another example, a student describes math as an area of concern based on her experiences in high school: "Like math, I did not do too well in high school, so I did not think I was going to do that well here either." Through her grades in the course, she discovered, "I am actually doing good in it." Much like this student, evidence of earned success was often in the form of positive feedback from professors and good grades, but students were also affirmed in their efforts when they received other positive responses to their behavior. For example, a student described her concern about interacting with professors, and she related a successful experience that had emerged from asking questions of her instructors.

That was one of my main things was I don't like talking to my teachers. I feel, I guess, nervous when I go talk to them about school work. ... It was a little nerve-wracking at the beginning, but once they started answer[ing] my questions with good answers, I felt much better.

In this instance, the positive response the student received from professors decreased her anxiety about talking to faculty members. These "good answers" were evidence that her interactions with professors had been a success.

Evidence of success appears as a key feature in these experiences. For example, while students spoke positively about hearing a kind or encouraging word from a faculty member, in our data these were not tied to confidence or identity in the same way as excelling on performance tasks. The most powerful experiences students described were earned, meaning they were less likely to recount shifts in confidence from tasks they deemed "easy." Finally, we found relatively few examples of students' confidence shifting when their assumed competence in a skill was confirmed. Instead, experiences of earned success appeared most salient to students when they were tied to previous negative experiences or areas of apprehension.

Our analyses of shifts in confidence indicate that these success moments not only reframe students' academic identities, but they may also be associated with increased motivation and productive academic habits and behaviors. This is evidenced above as students see that their efforts to apply study skills or

access resources are successful, and therefore they intend to continue applying those strategies. However, we also identified more generalized examples of enhanced academic aspirations and commitment to college. In particular, as students' expectations of community college were recalibrated, their perceptions of four-year institutions shifted as well:

For as long as I can remember [four-year college] was so far out of my mind. Cause, wow, I have to be like a perfect student to get in there. But I know now, my GPA is pretty good, I've got some study habits and I have confidence like, why not.

Just as they described a lack of motivation in association with a lack of confidence, positive shifts in confidence were linked to enthusiasm for their academic endeavors: "I am much more confident. I want to do everything. I want to be doctor. I want to be everything. Seriously. It gave me a lot of inspiration."

Discussion and Implications

The confidence with which students enter the classroom has real implications for student behaviors. When students do not expect to be successful they are less motivated and less likely to exert effort, and they may adjust their aspirations and engage in self-defeating behaviors to avoid failure (e.g., Cox, 2009). If their confidence is tied to a lack of information about the expectations of college, they may not engage in appropriate self-regulatory behaviors that lead to success (e.g., Yeager et al., 2011). Yet, as this study finds, college confidence is not static. Students experience shifts and changes in their perceptions of themselves as students as they engage with the college environment. Students reported that their confidence stemmed from destabilizations and earned successes in particular subject areas, as well as from their ability to navigate the nonacademic demands of college (i.e., interacting with professors and accessing support services) (O'Gara et al., 2008). Importantly, these compiled experiences contributed to their perceived ability to succeed in college. Students who experienced destabilization reported predominantly uncertainty about their ability to complete a college degree, which sometimes led to reevaluating their educational goals. a sign of "cooling out" (Clark, 1960). In contrast, students with more earned successes, particularly in areas where they previously struggled, experienced a "warming up" that translated to an increased confidence in their ability to complete a college degree and even take on more ambitious career goals, as well as positive academic behaviors to achieve these aspirations.

The shifts in confidence described in this analysis demonstrate the ways in which confidence is continually reconstructed through interactions and academic experiences. During their interviews, students

described multiple shifts in confidence across various subject areas in both directions. Based on these data and rates of student attrition in community college, even among students who persist into a second semester, we hypothesize that multiple ongoing experiences of earned success may be necessary to maintain academic confidence. The data highlight the potential of specific types of interactions with professors and staff to encourage positive academic behaviors and prevent the cooling out of student aspirations.

Earned Success in the Classroom

Our findings show how feedback is central to both experiences of destabilization and earned success. Good grades, written comments, and verbal exchanges provided students evidence of the connection between their academic habits and positive results and were an important part of students' descriptions of earned success. These forms of teacher feedback also provided guidance during destabilizing experiences. In fact, students who received specific feedback were able to identify the problem area and apply solutions; however, not all students received feedback in a form that allowed them to rectify the problem.

This evidence suggests that faculty members can structure experiences of both destabilization and earned success for students by making the results of students' efforts transparent to them. While negative feedback in the form of poor grades may be damaging if it calls into question students' ability to succeed and persist in college, our data suggest that there is danger in lowering expectations or in decreasing standards for student success. Thus, we argue for strategies to facilitate opportunities for students to experience success, even as they practice and acquire new skills. For example, by breaking a large, high-stakes assignment into its component parts, faculty can scaffold student learning and offer feedback more frequently with fewer repercussions for students' performance in the course. Similarly, feedback on ungraded assignments, such as a paper draft, can prepare students for instructors' expectations.

Interviewees' reliance on teacher feedback to gauge their learning suggests that students need additional opportunities to learn how to reflect on their work process and product. Learning how to self-assess gives students additional information about their progress and can be particularly useful for students who have little information about how to calibrate their academic behaviors to the demands of college (Karp & Bork, 2012). Asking students to reflect on the amount of effort they expended on a task or to evaluate their work against a rubric developed by the class can help students become more cognizant of the relationship between their academic behaviors and the grades they

receive. Likewise, if apprehensive students can learn to associate performance with effort rather than with innate characteristics or talent, they may be more likely to persist. Developing this orientation to ability and performance is particularly crucial when students encounter challenges, as they will perceive the struggle they encounter as part of the learning process rather than a weakness that cannot be overcome (Barragan & Cormier, 2013; Dweck, 2006).

Finally, instructors may also foster student success by providing opportunities for guided practice of academic skills such as note taking and study techniques to clarify what successful work and study habits look like at the college level. For example, the colleges in our study offered student success courses, required in students' first semester of study, which help students develop the academic habits (e.g., study skills and time management), self-assessment skills, and helpseeking behaviors that are associated with positive outcomes. However, such explicit instruction need not be limited to these courses. Instructors can also integrate guided practice on the aforementioned skills in introductory level courses. For instance, an introductory biology instructor could utilize a portion of a class during the first week to provide specific strategies for reading a science-based textbook: how it may differ from reading comprehension in another discipline, and how they may need to adjust their study habits (e.g., note-taking, test preparation) for science courses. However, given that many instructors lack explicit pedagogical training, adopting such a strategy may require additional faculty development so that they know how to support students' academic and nonacademic needs.

Our analysis indicates that experiences of earned success occurred when students applied successful strategies and saw the result of their efforts. Findings suggest that instructors can facilitate these experiences by helping students identify their own strengths and needs, providing guided practice on strategies to accomplish challenging tasks, and offering constructive feedback.

Future research should explore the nature of experiences of earned success, including how they vary across discipline, the relative effectiveness of the strategies recommended above, and additional classroom practices that might foster student confidence. Additionally, our findings demonstrate that student confidence is not static, which future studies should examine in terms of when and how shifts in confidence occur for both successful and unsuccessful students. Understanding when and how these shifts typically manifest is important for designing strategies that may help maintain the momentum that students gain through their early experiences of earned success. Finally, additional perspectives on the social forces that

shape students' academic confidence and their expectations for success have much to contribute in helping educators create environments in which students perceive themselves as competent college students, as well as become and remain committed to their academic and professional aspirations.

References

- Alexander, K., Bozick, R., & Entwisle, D. (2008). Warming up, cooling out, or holding steady? Persistence and change in educational expectations after high school. *Sociology of Education*, *81*, 371–396.
- Aronson, J., Fried, C. B., & Good, C. (2002). Reducing the effects of stereotype threat on African American college students by shaping theories of intelligence. *Journal of Experimental Social Psychology*, 38, 113–125.
- Astin, A. W. (1993). What matters in college? Four critical years revisited. San Francisco, CA: Jossey Bass.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28, 117–148.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: Freeman.
- Barragan, M., & Cormier, M.S. (2013). Enhancing rigor in developmental education. *Inside out: A Publication of the Scaling Innovation Project, 1*(4), 1-5.
- Cech, E., Rubineau, B., Sibley, S., & Seron, C. (2011). Professional role confidence and gendered persistence in engineering. *American Sociological Review*, 76(5), 641–666.
- Clark, B. R. (1960). The "cooling-out" function in higher education. *The American Journal of Sociology*, 65(6), 569–576.
- Cox, R. D. (2009). "It was just that I was afraid": Promoting success by addressing students' fear of failure. *Community College Review*, *37*(1), 52–80.
- Duckworth, A. L., Grant, H., Loew, B., Oettingen, G., & Gollwitzer, P. M. (2011). Self-regulation strategies improve self-discipline in adolescents: Benefits of mental contrasting and implementation intentions. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 31(1), 17-26.
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York, NY: Random House.
- Elizondo, E., Allen, W., & Ceja, M. (2012). No color necessary: High school students' discourse on college support systems and college readiness. In W. Tate (Ed.), *Research on schools, neighborhoods and communities: Toward civic responsibility* (pp. 269–278). New York, NY: Rowan & Littlefield.
- Gore, P. A. (2006). Academic self-efficacy as a predictor of college outcomes: Two incremental validity studies. *Journal of Career Assessment*, 14, 92–115.

- Gurin, G., & Gurin, P. (1970). Expectancy theory in the study of poverty. *Journal of Social Issues*, 26(2), 83–104.
- Graham, S. (1989). Motivation in Afro American. In G. Berry & J. Asannen (Eds.), *Black students: Psychosocial issues and academic achievement* (pp.40-68). Newbury Park, CA: Sage.
- Howard, T. C. (2003). "A tug of war of our minds": African American high school students' perceptions of their academic identities and college aspirations. *The High School Journal*, 87(1), 4–17.
- Jehangir, R. R. (2009). Cultivating voice: First-generation students seek full academic citizenship in multicultural learning communities. *Innovative Higher Education*, *34*(1), 33–49.
- Karp, M. M., & Bork, R. H. (2012). "They never told me what to expect, so I didn't know what to do": Defining and clarifying the role of a community college student (CCRC Working Paper No. 47). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Leese, M. (2010). Bridging the gap: Supporting student transitions into higher education. *Journal of Further and Higher Education*, 34(2), 239–251.
- Liem, A.D., Lau, S., & Nie, Y. (2008). The role of self-efficacy, task value, and achievement goals in predicting learning strategies, task disengagement, peer relationship, and achievement outcome. *Contemporary Educational Psychology*, 33, 486-512.
- Multon, K. D., Brown, S. D., & Lent, R. W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology*, 38, 30–38.
- O'Gara, L., Karp, M. M., & Hughes, K. L. (2008). Student success courses in the community college: An exploratory study of student perspectives. *Community College Review, 36,* 195–218.
- Oyserman, D., Bybee, D., & Terry, K. (2006). Possible selves and academic outcomes: How and when possible selves impel action. *Journal of Personality and Social Psychology*, 91(1), 188–204.
- Paunesku, D., Walton, G. M., Romero, C., Smith, E., Yeager, D., & Dweck, C. (2015). Mind-set interventions are scalable treatment for academic underachievement. *Psychological Science*, 26(6), 784-793.
- Pascarella, E., & Terenzini, P. (1998). Studying college students in the 21st century: Meeting new challenges. *Review of Higher Education*, 21(2), 151–165.
- Rendón, L. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education*, 19(1), 33–50.

- Rendón, L. (2002). Community College Puente: A validating model of education. *Educational Policy*, 16(4), 642–667.
- Rosenbaum, J. E., Deil-Amen, R., & Person, A. E. (2006). *After admission: From college access to college success*. New York, NY: Russell Sage Foundation.
- Sander, P., & Sanders, L. (2006). Understanding academic confidence. *Psychology Teaching Review*, 12(1), 29–37.
- Snyder, T., & Dillow, S. (2012). *Digest of education statistics 2011*. Washington, DC: National Center for Education Statistics, Institute for Education Sciences, U.S. Department of Education.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797–811.
- Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition. Chicago, IL: University of Chicago Press.
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Current Directions in Psychological Science*, 23, 73-82.
- Welch, O. M., & Hodges, C. R. (1997). Standing outside on the inside: Black adolescents and the construction of academic identity. New York, NY: New York State University Press.
- Wood, J. L., & Turner, C. S. (2011). Black males and the community college: Student perspectives on faculty and academic success. *Community College Journal of Research and Practice*, 35(1/2), 135–151.
- Yeager, D., Muhich, J., & Gray, N. (2011, December). What we're learning about productive persistence: Early evidence from the Statway. Presentation at

the Carnegie Foundation for the Advancement of Teaching's Winter Quantway Institute.

SUSAN BICKERSTAFF is a Senior Research Associate at the Community College Research Center at Teachers College, Columbia University. She conducts research on developmental education and faculty and student experiences in community colleges. Recent publications have focused on developmental mathematics reform and faculty development. She holds a Ph.D. in education from the University of Pennsylvania.

MELISSA BARRAGAN is a Ph.D. candidate in Criminology, Law and Society at the University of California, Irvine. She has published on topics related to developmental education, teaching and learning, and student success in US community colleges. She has also published on issues pertaining to gun offenders and gun policy within the United States.

ZAWADI RUCKS-AHIDIANA is a Ph.D. candidate in the Sociology department at the University of California, Berkeley. Her publications include studies of student success courses, teaching online community college courses, and the social networks of community college students. She teaches qualitative data analysis at UC Berkeley's D-Lab.

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