

# Chapter I. No Reform Is an Island: Tracing the Influences and Consequences of Evidence-Based Placement Reform at a Two-Year Predominantly Black Institution

Jessica Nastal, Jason Evans, and Jessica Gravely  
PRAIRIE STATE COLLEGE

**Abstract:** This chapter surveys more than ten years of institutional history about writing placement at a predominantly Black two-year college, including data about placement rates and course success. Even as a community college that did not rely on standardized tests for placement, our experiences in many ways reflect the broader trends and concerns in writing placement, demonstrating that even well-intentioned homegrown placement tools also reproduce the flaws and betray the influences of the larger system.

Placement at Prairie State College (PSC) has always existed in a kind of institutional desert. The faculty determine the standards, the administration runs the day-to-day processes, but no one, it seems, is in charge. The state law governing community colleges in Illinois delegates placement authority broadly to colleges and invokes vague principles of ability, competence, and similarity to state university programs:

After entry, the college shall counsel and distribute the students among its programs according to their interests and abilities. Students allowed entry in college transfer programs must have ability and competence similar to that possessed by students admitted to state universities for similar programs. Entry level competence to such college transfer programs may be achieved through successful completion of other preparatory courses offered by the college. (Public Community College Act, 1961/2015)

Yet the state offered community colleges little guidance about what constitutes “entry level competence” before 2018, when a statewide placement framework was released, so individual colleges have interpreted these guidelines by themselves. For our English faculty, this has largely meant interpreting course descriptions and learning outcomes mandated in our statewide course articulation

agreements. But here is the institutional desert: With the day-to-day administration of placement in the hands of a non-faculty manager, the result for PSC has been that, every few years, the English faculty talk about the placement process and make small changes—but not through a regularized institutional process. There was also a division between “Reading” and “English” that, although not housed in separate divisions, meant faculty members saw themselves as somewhat institutionally separate; as primarily teachers of their respective classes, not as stewards of the larger processes and policies affecting students’ placement. As there was no pressure from the state system to actively attend to placement, the English faculty focused instead on revisions to course offerings, curricula, course and program assessment, course learning outcomes, and alignment—all aspects of the institution clearly within our control.

When we did think about the placement process, which used a direct writing sample, we felt no special urgency to revisit or revolutionize what was already, in our minds, on the better end of what seemed possible or necessary. We knew, for instance, that we were in the minority of community colleges that didn’t rely only on a standardized test for placement. While we recognized the limitations of both high-stakes exams and dropped-from-the-sky timed writing placement practices, we still tended to “re-place” very few students after re-assessing them at the beginning of developmental classes (that is, “bump them up” via use of a form that made it easy for our department to track these cases; cf. Poe et al., 2019). There has long been a pervasive sense that the obstacles to student success seemed to emerge from external circumstances, material conditions, and systemic racism and classism, not as a result of being over- or under-placed.

With the benefits of hindsight, this chapter traces some of our department’s thinking about placement over the past ten years or more. We have not arrived at any easy answers about writing placement, but rather a deeper appreciation for the ways in which examining any institutional practice reveals an ecology of people, processes, intentions, pathways, and gateways and barriers. If reforms and revolutions are to have any success, we will need nuanced accounts of our pasts and present, the better to question both our received ways of doing things and our reasons for wanting different.

## Institutional and Departmental Context

Prairie State College is a medium-sized, suburban public two-year college outside of Chicago, Illinois. The college offers certificates, associate degrees, and applied associate degrees; it fulfills its mission (Figure 1.1) by offering non-credit, career technology education (CTE), and transfer classes and programs to community members. Courses are offered in different modalities (in-person, online, and hybrid) and in different term lengths (16-, 14-, 12-, and 8-week terms during fall and spring; 8- and 5-week terms in summer).

### **Mission Statement**

Prairie State College fosters collaborative relationships that empower students to achieve their education and career goals. The college embraces its diversity, nurtures life-long learning, and supports community and economic development.

**Values:** Learning Excellence Accessibility Respect INtegrity

### **Visions Statement**

Prairie State College will offer rigorous academic programs, meet the needs of the local workforce, cultivate the values of sustainability, and demonstrate an awareness of its responsibilities in a global society.

*Figure 1.1. Prairie State College mission, values, and vision from college website: <https://prairiestate.edu/about-us/mission.aspx>.*

PSC is accredited by the Higher Learning Commission, and some programs are individually accredited: automotive technology by National Automotive Technical Education Foundation, dental hygiene by American Dental Association Commission on Dental Accreditation, nursing by Accreditation Commission for Education in Nursing, and surgical technology by Commission on Accreditation of Allied Health Education Programs. We participate in the Illinois Articulation Initiative (IAI), a statewide initiative that ensures transferability of courses among more than 100 public and private colleges and universities. PSC also has entered into individual transfer articulation agreements with local universities; for example, in pharmacy with the University of Illinois at Chicago. Prairie State College is governed by an elected Board of Trustees and guided by four labor federations: full-time faculty, adjunct faculty, support staff, and police.

Our district has been called the most geographically, socioeconomically, and racially diverse of all Illinois community colleges. We're a Predominantly Black Institution and an Emerging Hispanic Serving Institution. In Fall 2018, we enrolled 3,946 students, 55 percent of whom identified as Black, 19 percent Hispanic/Latinx, and 18 percent White (Integrated Postsecondary Education System [IPEDS], 2020). Like our community college counterparts nationwide, most of our students are part-time and women, about two-thirds each. We have a significant number of adult students as well as Early College Initiative students. The average student age is 24, and 57 percent of students are 24 and under. PSC students' program enrollment also mirrors national trends. In 2017–2018, PSC conferred 832 credentials: 35 percent of those were in the health professions, 32 percent in liberal arts and sciences, 8 percent in computer information systems, 8 percent in mechanic and repair technologies, and 5 percent in biological and physical sciences (IPEDS, 2020).

PSC's Office of Institutional Research uses IPEDS cohort definitions to determine its degree completion and transfer rates; these cohorts are constrained to first-time, full-time students, an admittedly limited definition not reflective of

two-year college enrollment. PSC's 2015 cohort graduation rate was 20 percent, and its transfer-out rate was 29 percent (Prairie State College, 2018). Its overall graduation rate was recently listed as 17 percent (IPEDS, 2020). These definitions and differing numbers point to a persistent tension within higher education (cf. Sullivan, 2008): How can we effectively report on student success measures, particularly a) in two-year colleges and b) for writing placement in two-year colleges?

As of January 2018, PSC employed 83 full-time faculty and 234 adjunct faculty (Table 1.1 and Table 1.2). About 60 percent ( $n=49$ ) of full-time faculty were female. White faculty (and staff) were overrepresented at the college, at 63 percent of adjunct faculty and 78 percent of full-time faculty (including the three of us). In this overrepresentation, PSC is like many institutions nationwide (cf. Inoue, 2019); the college is working to address this imbalance and its consequences through hiring practices, institutional efforts, and professional development within departments and through the Office of Equity and Inclusion as well as the Center for Teaching and Learning, both created in 2020.

The English department currently has nine full-time faculty members. Our numbers of adjunct faculty vary depending on enrollment, and a core group of eight to ten adjunct faculty members regularly teach, work as writing center consultants, and read writing placement exams. Like our counterparts across many other departments, ours is a predominantly White faculty. Members of the department are involved in national writing studies organizations and regularly attend and present at conferences, including the Conference on College Composition and Communication and the Writing Program Administration Conference.

**Table 1.1. Sex Demographics of Full- and Part-Time Faculty, 2018**

Role	Female	Female %	Male	Male %	Total
Adjunct faculty	117	50%	117	50%	234
Full-time faculty	49	59%	34	41%	83

**Table 1.2. Race and Ethnicity Demographics of Full- and Part-Time Faculty, 2018**

Role	African American/Black	AA/BL%	Hispanic/Latinx	H/L%	White	W%	Total
Adjunct faculty	72	31%	11	5%	147	63%	234
Full-time faculty	12	14%	3	4%	65	78%	83

In recent years, Jessica Nastal and Jason Evans have both additionally served on statewide bodies, created by the Illinois Community College Board, on writing placement and developmental education reform.

Full-time faculty at the college have a base load of 15 credit hours per semester, typically five classes (Prairie State College, 2017). If full-time English faculty teach at least two composition courses, the course load is reduced to 12 hours in recognition of the time and attention students need in a writing-intensive course. The full-time faculty contract further articulates course caps of 30 for most general education classes, 22 for credit-bearing Composition I and II, and 18 for all developmental courses (English, Reading, and Math). Many full-time faculty also receive reassigned time for administrative duties, such as department chair—who sets meeting agendas, collaborates on professional development, and serves as liaison to the administration—or program coordinator—who hires and supports adjunct faculty, staffs sections, conducts annual assessment projects, and fulfills state-required program reviews.

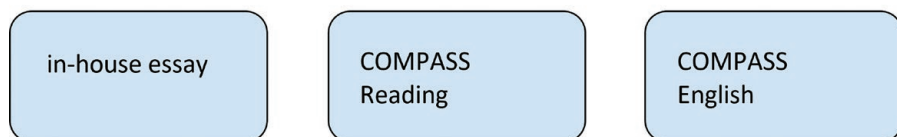
Jason Evans served as department chair and coordinator from 2006–2012, as chair from 2014–2015, and as Developmental Reading/English coordinator since 2017. Jessica Gravely has served as English coordinator since 2014. Jessica Nastal served as department chair from 2019–2020 and has received reassigned time for work on accreditation, assessment, and a Student Success Pilot, applying Achieving the Dream's programs at Odessa College and Oakton Community College (Barnett, 2018) to PSC.

## History of Our Placement Process and Courses

Before the changes to the PSC placement process that we describe here, the most recent major changes to the process had happened in the 1990s, before any of our current faculty members were teaching at PSC. Starting in the 1990s, students wrote an essay in response to one of a few locally developed prompts, and they took the COMPASS English and Reading exams. Faculty readers would look at all three pieces of information when determining placement, though a strong writing sample would always outweigh a lower score on either COMPASS exam. Starting in about 2007, we realized we weren't relying enough on the COMPASS English score to justify the time and cost, so we asked students to complete just the in-house essay and COMPASS Reading exam (Figure 1.2).

The death of COMPASS in 2015 (cf. Nastal, 2019) had the galvanizing effect of forcing a change to a major piece of the placement puzzle. Its disappearance meant that we would lose one way to identify students who may need additional assistance with college reading. Our desire to revise writing placement at PSC was further kindled by the recent arrival of two new faculty members, one with expertise in literacy studies and one with expertise in writing placement.

### 1990–2007



### 2007–2015

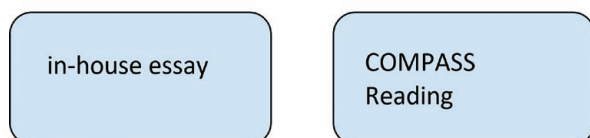


Figure 1.2. Placement from 1990s–2015.

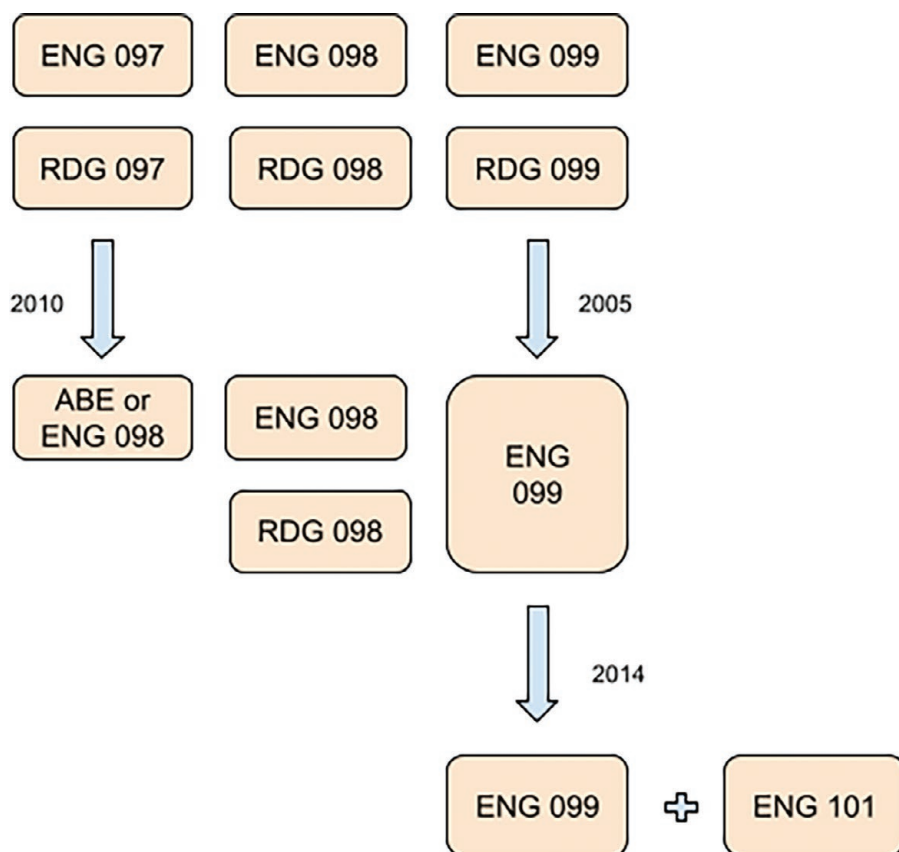


Figure 1.3. Course offerings, 1980s–present.

Furthermore, our courses themselves had changed over the years, as represented in Figure 1.3 (see Evans, 2018). Since the 1980s, students might be placed into one of three levels of developmental English and/or reading—ENG 097, ENG 098, and ENG 099. But in 2010, after years of observing dismal success and persistence rates in students who began in ENG 097, the faculty and administration agreed to stop offering it. Students who had previously placed into ENG 097 would now either be encouraged to join literacy programs in adult basic education or take ENG 098. English 099 and Reading 099 had been separate courses until 2005, when they were combined as integrated reading and writing learning communities in a single six-credit-hour course, ENG 099. From 2012 to 2014, we piloted courses modeled on the Accelerated Learning Program (ALP; Adams et al., 2009). Around the same time, changes to Pell Grants led to sharper restrictions on the total number of credit hours considered Pell-eligible—a significant concern for many of our students, 41 percent of whom receive Pell Grants (IPEDS, 2020). As a result of the pilot and the changes to Pell, all ENG 099s were changed to three-credit-hour courses. In short, even if our placement processes had remained relatively stable, the developmental courses into which we placed students had shifted—a topic to which we return in the “Lessons” section.

## Evidence for Placement Reform

Our placement process relied on a timed, impromptu writing sample, for which students selected one of three to five prompts that did not require additional preparation or knowledge. As a result, students wrote personal essays or decontextualized arguments about relatively staid topics, such as supporting school uniforms (cf. Perelman, 2012). When we revised our placement process, we wanted to provide students with an opportunity to demonstrate their integrated reading and writing processes. A department-wide portfolio assessment process in ENG 101 had taught us that entering composition students frequently struggled to summarize the viewpoints of others, and we believed that our placement process should assess students’ ability to read, summarize, and respond to various viewpoints. Doing so would provide students with a better opportunity to understand the curriculum they were about to enter (Harrington, 2005) and provide readers with more information about students’ familiarity with the kinds of reading and writing tasks they would encounter in ENG 101.

Looking back on a 2015 memo to the administration regarding this placement redesign, we see a concern for trying to place more students into ENG 101 while still ethically placing students overall. These desires probably grew from three experiences: our integrated reading and writing ENG 099, ALP, and concerns about justice and equity that grew from our ENG 101/102 English Program Review (2011–2016) and Jessica Nastal’s survival analysis of placement data and success rates (2019).

## Evidence From Integrated Reading and Writing

In our six-credit-hour ENG 099 (2005–2014), we offered students a challenging mix of reading assignments (Hern & Snell, 2013), and students made connections across a variety of course readings. We held end-of-semester faculty meetings to discuss grading standards and together considered representative examples of student work. Several years of seeing what students could do with these challenging materials contributed to a feeling that many students would be able to handle a higher placement with adequate support. Piloting ALP (2012–2014) also contributed to this feeling that students could handle a higher placement if provided this additional support. Seeing students succeed in transfer composition has a way of informing attitudes about placement!

## Evidence From Illinois Community College Board Program Review

In 2016, the Illinois Community College Board (ICCB) modified its program review to more explicitly focus on equity issues. Previously, the ICCB program review process involved a general evaluation of different aspects of the program—without much attention to data that might reveal equity gaps in success rates. Prior to 2016, program coordinators had not been asked to scrutinize disaggregated data or make specific plans to address those equity disparities (and no internal processes within the college existed yet either, nor have been developed since then). Although the English department had long been aware that our composition courses had low pass rates, we had not yet reckoned with the racial disparities in our success rates. In 2017, in her work as English coordinator, Jessica Gravely shared with the department disaggregated data about student course-level success; we learned that, across the composition sequence during the 2011–2016 period, African American students had passed ENG 101 and 102 at substantially lower rates than White students.

## Evidence From Survival Analysis of Placement Data and Success Rates

Archival research and survival analysis of placement data and success rates across the composition sequence from 2012–2016, conducted by Jessica Nastal (2019), further showed just how rare it was for a student—most especially a Black male student—to be placed into ENG 098 or ENG 099 and persist and succeed in ENG 101 and ENG 102. Initial results were shared with the department in 2017 and showed that 82 percent of the students enrolled in ENG 098 from 2012–2016 were African American and Black, and only nine percent of those students ultimately passed ENG 101 at PSC. While Hispanic/Latinx students overall succeeded at higher rates than their African American and Black peers, White students were most successful throughout the courses. The data also revealed significant moments of loss throughout the writing sequence across all communities of students



(cf. Zaback et al., 2016). For example, about half of the students who began ENG 098 did not pass it; then, of the students who did pass, two-thirds continued to the next course in the sequence; for ENG 099 before ALP, “about 75% of the students who began English 099 never passed English 101” (Evans, 2018).

The data alarmed our department and administration alike; they seemed to show that, despite our intentions to create on-ramps to college education, our developmental courses could be seen as a form of “apartheid,” to use Ira Shor’s (1997) famous indictment of basic writing programs. It appeared the courses could be reproducing the very educational and thus social inequity they aimed to combat with their opportunities to help students develop foundational literacy skills needed to navigate college-level coursework.

Together, we had substantial evidence of how different student communities performed in the classes, and an increased sense of urgency to act in ways to achieve justice or to address equity disparities. In the semesters that followed, we offered more robust professional development on a variety of topics—in reading strategies for composition students; writing assessment and research-based approaches to feedback; assignment design that encouraged metacognitive reflection; as well as the history, grammar, and rhetorics of African American English. Along with many faculty across the college, our department discussed texts such as Kathleen A. Ross’s (2016) *Breakthrough Strategies: Classroom Based Practices to Support New Majority College Students*. Additionally, we rewrote our ENG 101 department-wide course agreements to work toward parity across the 30 or more sections among courses being taught.

## Locating the Right Placement, Post-COMPASS

With COMPASS about to expire and substantial data to show where inequities existed in our program, we knew that we needed something more institutionally responsive and equitable than a purchased test like ACCUPLACER. We also knew that we wanted to continue using a direct writing sample, in which we have had a fair amount of confidence. We already had in place the institutional pathways—a placement testing center, funds and processes for organizing readers, an understanding from Enrollment Services that placement results would not be instantaneous—and so our faculty could focus on the form and content of a new placement tool. These pathways, we might add, exert constraints on the kinds of options we were considering: Funding for readers, for instance, also means one income stream for our adjunct faculty members.

The department explored a few different options for our post-COMPASS world. We considered using a standardized reading assessment. Several department members took the TABE and COMPASS exams to see what the experience might be like for students. While standardized reading assessments offered some benefits that we would not be able to realize by ourselves—development under the guidance of psychometricians and large sample groups, for starters—they

also have been shown, broadly, to perpetuate inequitable educational outcomes (Scott-Clayton, 2012), which is particularly alarming at our Minority-Serving Institution. Plus, they're kind of a drag to take. We weren't sure their potential benefits were worth the potential costs.

We also considered the possibility of using directed self-placement (DSP), which was something we'd discussed since at least 2005. We recognize that, particularly in the wake of the COMPASS exam ending and in the move toward equity and justice, leaders in the field have called on practitioners to implement more agency-affirming methods of writing placement. The TYCA White Paper placement reform (Klausman et al., 2016), for example, recommends using multiple measures or directed self-placement, and the state of Illinois has moved toward a multiple *single* measures approach. Over the years, however, faculty members have expressed a number of concerns with the DSP process: the potential for students—especially women and people of color—to under-place themselves (Cornell & Newton, 2003; see also Ketai, 2012; Inoue & Poe, 2012), a disconnect between how students perceive their writing abilities and how their instructors perceive them (DasBender, 2012; Lewiecki-Wilson et al., 2000), the challenge of requiring students to apply past experiences to new writing situations (Bedore & Rossen-Knill, 2004; Gere et al., 2010), the difficulty of encouraging self-awareness for students who may have internalized a negative educational gaze (Schendel & O'Neill, 1999), and the complex skills of encouraging metacognition and transfer of knowledge to new situations. Here, Mike Rose's (e.g., 2012) scholarship resonated with many of our faculty who were raised in working-class families and have intentionally chosen to teach at a two-year college where most students are eligible for Pell Grants.

Of special concern to us, based on interactions with students in and out of class, is that DSP requires students to self-identify whether they would benefit from additional support—and we know that this is an admission not readily made. In our courses, students express hesitancy in using office hours, for instance, because they don't want to burden their instructors and because they believe they should just know how college works; if they have questions, they think it's up to them to figure out the answers or else it's more evidence they don't belong (cf. Villanueva, 1993). Thus, while we saw value in DSP encouraging students to assert their agency—and our composition sequence seeks to instill this agency—we were not yet convinced DSP was the best method of placement for PSC. Furthermore, the already-ambiguous institutional location of placement at the college made us question whether the college would support the labor involved in implementing DSP—from creating a procedure to working closely with all stakeholders on the process (Blakesley et al., 2003; Saenkhum, 2016). We are interested to learn more about how DSP affirms student dignity and contributes toward their success in the course (cf. Toth, 2019). We will continue to take a cautious approach to implementing DSP as we wait for more information on how the practice affects new majority college student communities; here, we echo Laura Aull's (2021) call regarding “the critical need to investigate student

group differences, because fairness and justice are crucial for evaluation of assessment efficacy” (p. 11).

Our department also considered implementing a capabilities-based approach (Poe et al., 2019)—that is, not having placement at all—especially in light of the state moving toward reduced developmental education course offerings. States like Florida had fully eliminated developmental education courses, and in Illinois, new initiatives were on the horizon, such as high school transitional English and math classes that would guarantee successful students direct placement into college-level English courses.

Eliminating the placement process entirely would require the college to route students to the free adult basic education courses for literacy instruction or to enroll them in the college credit-bearing course ENG 101. This would require a radical revision, and expansion of, existing student support structures not only within our department but in other areas of the college. Placement into ENG 099 or higher is a prerequisite for many general education courses and certificate programs; the placement score has long been used as a proxy for students’ literacy skills across the college. Without a clear way to fund a robust expansion of student support structures, not to mention professional development for faculty across the college, our department felt that this no-placement option would pose significant challenges. Particularly because the college’s funding model is tied to student enrollment in credit hours, it seemed risky to nix ENG 098 and ENG 099 credit hours at the very moment when students enrolled in ENG 101 and other college-level courses might be in need of more reading and writing support than ever. This is another one of those instances where our limited resources inhibit us—as well as the institutional leadership we would need to make this work across the college.

Those alternatives outlined, what did we adopt? In the new placement process (Figure 1.4), students read and annotate a short nonfiction article, write a summary of the article, and then write an essay in response to the article. The annotated article, summary, and essay are reviewed by at least two trained adjunct faculty member readers, who are paid an hourly wage (currently \$24–\$25 per hour) for this labor.

We reviewed potential articles using Microsoft Word’s Flesch-Kincaid measurements of grade level and reading difficulty, then analyzed them further using a rubric for qualitatively assessing texts (Fischer & Frey, 2013). Finally, we developed several writing prompts in which students would respond or engage in some way with the reading. Our placement rubric, which relies on analytic scoring, is shown in Figure 1.5. In using this rubric, we have had some discussion of a “Meat Loaf Rule”—i.e., two out of three ain’t bad. In other words, the rubric’s layout makes it seem like the annotation and essay might always carry the same weight, while we recognize that some students may not annotate *because* they understood the reading well. Likewise, students who annotate and summarize well but struggle with the essay may have some foundational literacy skills that will serve them well in ENG 101.

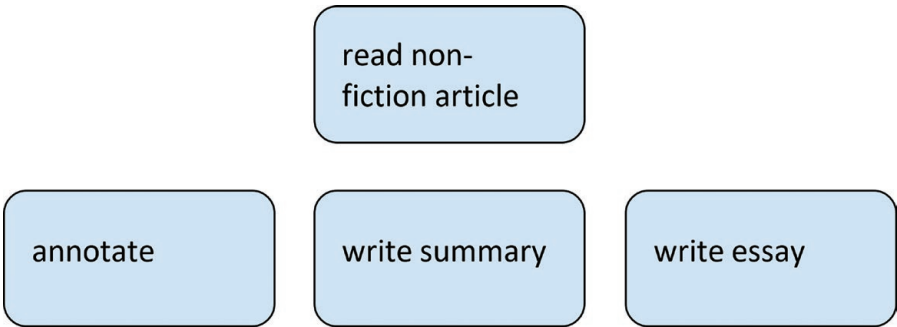


Figure 1.4. Placement process, 2016–present.

Time used to complete test \_\_\_\_\_  
Article \_\_\_\_\_

READING/ENGLISH PLACEMENT ASSESSMENT

STUDENT \_\_\_\_\_ SEMESTER/YEAR: \_\_\_\_\_ OVERALL PLACEMENT \_\_\_\_\_

	AEDE 099	English 099	English 101
<b>ANNOTATION</b> Sparse underlining with no written comments; Whole paragraphs highlighted with no indication of important ideas or questions; marks limited to a single type of interaction, such as underlining unfamiliar words	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>SUMMARY</b> Summary misses the main ideas and does not show an understanding of the article; Summary is not written in student's own words	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ESSAY</b> Has some awareness of paragraphing—ideas are grouped by sentences; has some awareness of end punctuation—sentences begin and end, even if the application of punctuation is sometimes uneven; makes some kind of sense—the ideas could be clearer, but there is some sense of writing to answer a question or prove a point	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 1.5. Placement rubric.

We also relished the chance to introduce some subtle messages into the process. Whereas for the COMPASS Reading exam, students would read passages on several random topics, we selected articles for the new placement process with an eye towards messages that we thought would be helpful for students beginning their college studies. As David S. Yeager and colleagues (2016) demonstrated, small interventions as a student begins college can equip them with perspective on the challenges of college studies. Reading and writing about “growth mindset” in their placement exam, for instance, may make a small but important difference in how students approach studying. We have even tried, with mixed success, to avoid calling this instrument an exam or test, instead using words like “assessment” or simply “process.”

After we felt the design of the new placement process captured our goals, we piloted three initial versions. To quell concerns of some faculty members, we wanted to make sure that each version tracked with the established measure. This points to a tension within the department—how do we increase the number of students, particularly BIPOC students, experiencing the college-credit-bearing class first, while attending to concerns about supporting individual students' success?

During a pilot period in the summer of 2016, we asked students to take both the COMPASS Reading exam and our new three-part placement tool as a measure of reliability, to compare our placement with the broad bands of placement that COMPASS Reading would have predicted. We analyzed a sample of 100 students who took both the new placement tool and the COMPASS Reading exam, and found that the new placement tool produced results roughly equal to what COMPASS Reading would have predicted. The two agreed 86 percent of the time; COMPASS would have resulted in higher placement six percent of the time, and our placement test eight percent of the time. Looking at some of the discrepancies more carefully, our literacy expert, Megan Hughes, noted the new version seemed to place higher those students who would have scored in the developmental range on COMPASS, but may place lower students who would have scored in the ENG 101 category based on the COMPASS Reading scores.

The pilot data showed our revised placement tool resulted in increased placement into college-level composition, which meant students were getting access to credit-bearing courses more quickly and, presumably, would be better positioned to succeed not only in English coursework but also in their longer-term plans to seek a degree, transfer, or obtain a certificate. Our administration viewed these results as an indication that the new placement methods better reflected the college's mission of access and equity.

## Understanding the Effects of Placement Reform

As proud as we were to have produced a homegrown writing placement assessment—honoring the recommendations of TYCA White Paper on Placement Reform (Klausman et al., 2016)—we knew that the stakes of writing placement were very high for students, that there were no psychometricians among us, and that our pilot had been limited in some ways. Within our department, we were cautiously optimistic about the increased numbers of students placing into ENG 101, knowing that we could not really assess our new placement exam without also looking at how success rates might be affected. Many email exchanges and departmental meetings closed with the reaffirmation of our need to see the success rate data. Were we placing some students into ENG 101 and doing too little to support them? If there were equity disparities that needed to be addressed, how could we best work to support the opportunity to learn for all students? We asked, and asked again and again, but the college would not or could not provide numbers to answer our questions. In this matter, as in many

faculty initiatives, our work was appreciated by the administration but neither supported nor expected.

Without having success rate data in hand, we were ill-equipped to navigate decisions about departmental policies and professional development. We needed that information to understand whether we were over- or under-placing students, whether our practice was supporting all students’ success. In the wake of the new method, department members have raised questions about students’ reading abilities. Could these shifts be an indirect result of less prepared students entering ENG 101? Or were other factors coming into play, such as new ENG 101 outcomes, or the dismantling of our department-wide ENG 101 end-of-semester portfolio, which had previously placed great emphasis on student ability to integrate sources into their writing?

Our inability to access data on student experiences with placement also meant that we could not validate our new process. As department chair, Nastal sought validity evidence (Kane, 2006; White et al., 2015) to begin to address our concerns. If we could understand patterns of student course completion, repeated courses in the composition sequence, or placement into the sequence, for instance, we would be better able to understand how our placement process, portfolio elimination, outcomes revision, or curricular choices affected students’ success. If we could examine these data disaggregated by various communities at PSC—for example, Black/African American males or Pell-eligible students—we could better understand which student communities appear to be the most or least advantaged by our processes—an essential consideration in the pursuit of fairness (Elliot, 2016). Without the data, we were making decisions based on our personal beliefs and experiences. Nastal’s concern was that our fears about under-placement were not born out in the data.

The 2017–2019 years were also marked by many other changes that shaped, and complicated, our department’s understanding of how students and faculty were impacted by the new placement tool. Our pilot had suggested that the placement rates into developmental and college-level English would closely reflect the rates produced by COMPASS. How, then, could we fully account for the dramatic bumps in ENG 101 placements in Fall 2017, Fall 2018, and again in Fall 2019 (80%), and the relative drop-off in placement rates into developmental English (Table 1.3)?

**Table 1.3. Student Placement Results From 2015–2019 (N=7,413)**

		NP		ENG 098		ENG 099		ENG 101		Honors	
Year	n=	n=	%	n=	%	n=	%	n=	%	n=	%
2015	1,179	8	0.7%	112	9.5%	358	30.4%	696	59.0%	n/a	n/a
2016	1,726	16	0.9%	170	9.8%	502	29.1%	1,026	59.4%	n/a	n/a
2017	1,669	15	0.9%	100	6.0%	406	24.3%	1,147	68.7%	259	15.5%
2018	1,489	14	0.9%	38	2.6%	219	14.7%	1,164	78.2%	441	29.6%
2019	1,443	6	0.4%	40	2.8%	215	14.9%	1,161	80.5%	469	32.5%



A number of factors, beyond the placement test itself, were often floated in these discussions—could it be that we were seeing the impact of the Common Core State Standards, with its emphasis on mastery of nonfiction texts? In recent years, the college has experienced a demographic shift that has resulted in more students enrolling in the 18–22-year-old age range—students who are presumably closer to the writing assessment demands of their high school coursework. Additionally, during this same time period, the college has increased its numbers of high school students who are enrolling in PSC classes through our Early College Initiative program. To what extent did these demographic shifts affect our changing placement rates? Beginning in 2017–2018, our department also began collaborating with area high schools through a High School Partnerships initiative. Along with increased communication about our respective curricula, expectations, and general resources for students, our department shared our revised placement methods with area high school faculty and administrators.

Additionally, professional development for placement readers began to emphasize ways to assess placement essays without penalizing students for writing that demonstrated diverse linguistic features and grammatical patterns. Our revised placement training materials note that “Valuable ideas come in every variety of English, so readers should be careful to place students according to whether they get their messages across—to place based on writers’ organization and development of their ideas, not according to whether they demonstrate a mastery of SAE [Standardized American English].”

Then there are the sea-change kinds of turns in our profession: attention to new majority college students (Ross, 2016) and their needs (and shifting understandings of our roles/responsibilities in responding to those needs), the ethical turn in writing assessment (e.g., Elliot, 2016; Inoue & Poe, 2012; Poe et al., 2014; Slomp, 2016; Toth, 2018), discussions about “stereotype threat” in our department (Steele, 2010). All these things were also having some impact on placement.

While we could not access course- or program-level institutional data, we have been able to review data from the testing center. These show the number of students earning each type of placement possible: No Placement (NP; this directs students to adult basic education classes), ENG 098, ENG 099, and ENG 101. Placement readers also indicate whether a student is eligible for an Honors section of ENG 101. Table 1.3 shows the number and percentage of students’ placement results from 2015–2019. Figure 1.6 visually represents this information.

The rate students earned a No Placement remained below one percent during this four-year period. The rate at which students earned placement into ENG 098 and ENG 099, the developmental writing courses, decreased at noticeable levels. Students placed into ENG 098 at the highest rate, 9.8 percent, in 2016 and the lowest rate, 2.6 percent, in 2018. ENG 099 saw the highest rate, 30.4 percent, in 2015 and the lowest rate, 14.7 percent, in 2018. During this period, students’ placement into ENG 101 increased at the highest rate, from a low of 59 percent in 2015 to a high of 80.5 percent in 2019—a 21.5 percentage point increase.

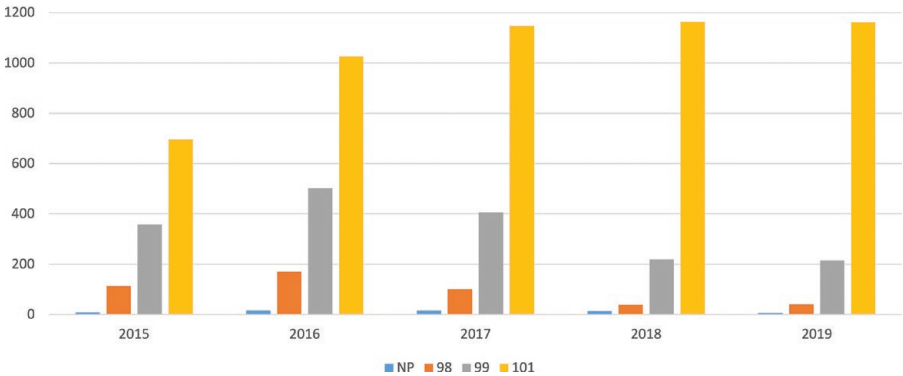


Figure 1.6. Student placement results from 2015–2019 (N=7,413).

We looked closely at students’ course level success rates within all composition courses in the time since we implemented the new placement procedure, and found they remain around 60 percent (Table 1.4), consistent with what Nastal (2019) found in the archival data from 2012–2016. It appears that no one is failing because of the higher placements, but also that no one is passing more.

Table 1.4. Course-Level Success from Fall 2017–Summer 2019 (N=7,506)

Course	Pass		Not Pass		Total
	n=	%	n=	%	n=
ENG 098	33	60.0%	22	40.0%	55
ENG 099	253	62.3%	153	37.7%	406
ENG 101	1,512	58.3%	1,082	41.7%	2,594
ENG 102	954	58.5%	677	41.5%	1,631

Additionally, we reviewed pass rates in ENG 101 from 2011–2019. Students have passed the course at increasing levels, as represented in Table 1.5.

Table 1.5. Pass Rates in ENG 101 From 2011–2012 Through 2018–2019

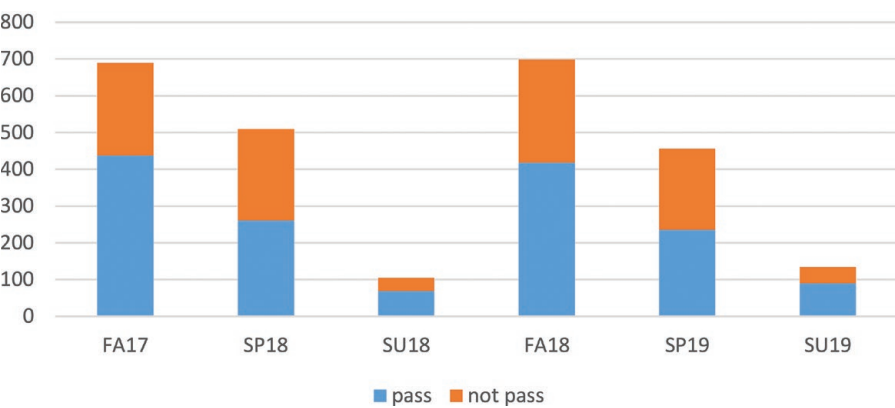
Academic Year	Pass Rate
2011–2012	49.8%
2012–2013	48.8%
2013–2014	53.4%
2014–2015	n/a
2015–2016	56.3%
2016–2017	n/a
2017–2018	59.6%
2018–2019	59%



When we reviewed ENG 101 pass rates from the first few years of the new placement procedure, we found the general trend of students performing at higher rates in fall and summer, and lower rates in spring, maintained. Pass rates continued to stay around 60 percent, with a low of 51.2 percent in Spring 2018 and high of 67.2 percent in Summer 2019, shown in Table 1.6 and visually represented in Figure 1.7.

**Table 1.6. Pass Rates for ENG 101 by Semester, Fall 2017–Summer 2019**

ENG 101	Pass		Not Pass		Total
	<i>n</i> =	%	<i>n</i> =	%	<i>n</i> =
FA17	438	63.5%	252	36.5%	690
SP18	261	51.2%	249	48.8%	510
SU18	69	65.7%	36	34.3%	105
FA18	418	59.8%	281	40.2%	699
SP19	236	51.8%	220	48.2%	456
SU19	90	67.2%	44	32.8%	134



*Figure 1.7. Pass rates for ENG 101 by semester, Fall 2017–Summer 2019.*

Overall, students are placing into the college credit-bearing class at noticeably higher levels than they did previously with the COMPASS placement exam, and it appears students are succeeding in these classes at similar rates.

### Consequences

The increasing numbers of students placed directly into ENG 101 has, over several semesters, increased our uncertainty about how to adjust the numbers of sections

of ENG 098, ENG 099, and ENG 101. We want to offer enough sections to meet the enrollment needs of students without over-scheduling and running the risk of canceling sections. Data showing a general trend of diminishing enrollment across the college since 2017 also complicated our ability to make accurate projections for how many sections our department would need to offer.

Even prior to the new placement exam, we had been canceling sections of developmental English due to low enrollment, and that trend continued after 2017. Our department offers roughly 10–15 percent the number of developmental sections that we once did. Course cancellations have left some faculty members hesitant to opt for teaching developmental English; frequently faculty members who plan to teach developmental sections will request to be tentatively slated for an alternate section as a back-up plan, typically a college-level course that is likely to run without enrollment issues.

Across the college, we also began to see more students who register after the semester officially begins, and so we now make a more conscious effort to offer developmental and college-level courses in a wider variety of terms: 16-, 14-, 12-week. The new placement test also led to a renewed emphasis on diagnostic essay assessments, to confirm a student's placement in the early weeks of a developmental course. Although it remains rare for a faculty member to “bump up” students from ENG 098 to ENG 099, or from ENG 099 to ENG 101, based on early diagnostic assessment, we've realized the importance of having various course formats. We want to avoid the problem of, say, a student being told their work suggests they are in fact ready for a higher course level, only to realize that no spots remain in those sections. Along the same lines, it's far preferable for a student to transfer to a new course which has not yet begun, rather than transfer into a course that may have begun two to three weeks earlier, where they need to exchange their textbooks and quickly catch up on work they have missed.

The reduced need for ENG 099, in particular, has shaped our offerings. As of 2015, students placed into ENG 099 faced two options—to enter our ALP and co-enroll in ENG 099 and ENG 101, or to take ENG 099 in the first semester by itself, followed by ENG 101 the next semester. With fewer students placing into ENG 099 in recent semesters, we have all but phased out the latter option in favor of the ALP option. Whereas previously some developmental faculty did not teach ENG 101, it is now the case that developmental English faculty teach across the composition sequence.

Yet, despite these positive changes, it has been consistently difficult to access data. For example, Jessica Gravely has been challenged when she has requested additional information about closing equity gaps—a requirement for our regular ICCB program reviews. In spite of persistent requests at multiple levels, Jessica Nastal has waited for two years for information that would allow the department to understand and analyze the impact of the significant changes discussed throughout this chapter (an issue our colleagues in the math department also face). Without this information, it remains difficult for us to determine the effi-

cacy and impact of our revisions. The college has discussed creating a data dashboard since at least 2010, but a more recent initiative to do so has been delayed.

These problems point to a serious consideration about our field's work in placement reform: Our institutions and systems may not have the resources, means, or desire to provide stakeholders with timely access to data, let alone the disaggregated data required to do equity work. At PSC, administrators urge all of us—including faculty—to make data-informed decisions. Our Strategic Enrollment Management plan, for instance, charges the college with addressing student persistence from developmental to college-level coursework, offering additional support to students enrolled in developmental classes, determining how to support African American students in gateway classes, improving success rates in gateway classes, creating awareness of success rates in gateway classes, identifying additional academic support services, and supporting professional development. How can we improve success rates in gateway classes without knowing what those rates are? How can we address student persistence from developmental to college-level coursework without real-time access to data, so we can see how our significant changes in a short time frame are affecting our students (Nastal, 2020)? Our discussion above of the many moving parts of the placement and composition ecosystem points to the importance of nuanced investigations of institutional context, and yet numerical data also have to be part of the conversation, particularly since the numbers exist in the college's data system and have only to be accessed.

## Lessons

There remains a lot of energy around reform of developmental education at the national and state level. We have a kairotic opportunity to lead on how we want to change the placement ecosystem—placement, curricula, professional development, student support, opportunity structures, faculty and tutor support, communication with stakeholders. Any changes have to take into account the practical realities of instructors and tutors who have been prepared to work with students who come to college with different skills, competencies, and dispositions.

As an example of this tension, at a state-level meeting about developmental education reforms, one of us asked what support the state or colleges might offer for professional development for instructors and tutors to adjust to what might be a wider range of student preparedness in college-level courses. An administrator in attendance, who is now the president at an Illinois community college, dismissed the suggestion, saying that it is the faculty's obligation to do this, not the college's or the state's. We couldn't help but see this response as short-sighted, as these tectonic changes affect everyone whose classes require an English placement prerequisite, and not everyone in every discipline has access to the knowledge about language and literacy that many English faculty enjoy. This response also demonstrates how our society's responsibility to educate the citizenry, rather

than being a matter of institutional or systemic priority and pride, devolves to individual instructors who can then be blamed for students' failure.

Reform doesn't happen in isolation and has significant implications for a number of stakeholders, especially students and instructors. In our case, placement reform affects staffing (cf., Blankenship et al., 2017), student reading in the credit-bearing courses, instructor grading policies, departmental curricular development, and collaborations with advisors. It points to professional development needs, reflected in our recent discussions about what "college-level" reading means; labor-based grading policies; social action research projects; linguistic variety; and genre variety. Our experiences throughout this process have underscored that writing placement reform reaches every part of our local ecosystem.

Our experience also raises questions about the potential change to our community college mission: What happens when all students enter the credit-bearing course (Poe et al., 2019)? How do we create opportunity structures (Elliot, 2016) for all students? Are we denying access to education for some—perhaps even by giving students access to the credit-bearing transfer course while denying access to educational and other supports intended to promote success? For students whose K-12 education has not given them access to rigorous literacy instruction, is the demise of developmental education—aided by our good-faith efforts to place students more accurately and avoid inequitable outcomes in placement—one more way our society says that your social destiny depends on where you were born (Evans, 2012)?

As we navigate the wake of our institutional reforms, we continue to look back at the Open Admissions movement to learn from those leaders' lessons. John Brereton explained in *Talking Back*,

Coming from this highly literary first-year course at Rutgers, my entry to full-time teaching was a serious shock. In the City University of New York's Open Admissions program in its first year, 1970, my students were much more diverse; many were what my colleague Mina Shaughnessy would later call "basic writers," shockingly *unliterary*—unacquainted with key discursive conventions and values of higher education. Their lives and their high schools offered them little preparation for the college composition course I was prepared to teach, one emphasizing careful reading and highly polished writing, assuming a specific cultural and literary background. But soon, with some of my CUNY colleagues, *I recognized that it was we, not just the students, who needed to change. And we had just fifteen weeks—one semester—to improve their writing or the students would be dismissed from college, the open door turning into a revolving door.* [emphasis added] (Gannett & Brereton, 2020, p. 142)

The English department at PSC, along with our colleagues state- and nation-wide, are dedicated to making sure our open door doesn't become a "revolv-

ing door.” This moment—with COMPASS’s demise, the ethical turn, the explicit goal to counteract decades of systemic racism—makes it clear that we must continue to change. We must continue to learn how to meet our students’ needs and help them understand the needs of their new writing contexts.

## Acknowledgments

Thank you to the students, colleagues, family, and friends who support and sustain us. Thank you to the English department, Adult Basic Education and Literacy department, Student Success and Testing Center, and Advising Center at Prairie State College. Special thanks to the many dedicated stewards of community college student success.

## References

- Adams, P., Gearhart, S., Miller, R., & Roberts, A. (2009). The Accelerated Learning Program: Throwing open the gates. *Journal of Basic Writing*, 28(2), 50-69. <https://doi.org/10.37514/JBW-J.2009.28.2.04>
- Aull, L. (2021). Directed Self-Placement: Subconstructs and group differences at a U.S. university. *Assessing Writing*, 48. <https://doi.org/10.1016/j.asw.2021.100522>
- Barnett, E. (2018, March 9). Faculty leadership and student persistence—A story from Oakton Community College. *Community College Resource Center: The Mixed Methods Blog*. <https://ccrc.tc.columbia.edu/easyblog/faculty-leadership-student-persistence-oakton-community-college.html>
- Bedore, P., & Rossen-Knill, D. F. (2004). Informed self-placement: Is a choice offered a choice received? *WPA: Writing Program Administration*, 28(1-2), 55-78.
- Blakesley, D., Harvey, E. J., & Reynolds, E. J. (2003). Southern Illinois University Carbondale as an institutional model: The English 100/101 stretch and directed self-placement program. In D. Royer & R. Gilles (Eds.), *Directed self-placement: Principles and practices* (pp. 207-241). Hampton Press.
- Blankenship, C., Canava, A., Jory, J., Lewis, K., Stanford, M., & Stephenson, B. (2017). Re-assessing composition at open access institutions: Using a threshold framework to reshape practice. *Journal of Writing Assessment*, 10(1). <http://www.journalofwritingassessment.org/article.php?article=113>
- Cornell, C. E., & Newton, R. D. (2003). The case of a small liberal arts university: Directed self-placement at DePauw. In D. Royer & R. Gilles (Eds.), *Directed self-placement: Principles and practices* (pp. 149-178). Hampton Press.
- Council of Writing Program Administrators (CWPA). (2014). *WPA outcomes statement for first-year composition*. [https://wpacouncil.org/aws/CWPA/asset\\_manager/get\\_file/350909?ver=3890](https://wpacouncil.org/aws/CWPA/asset_manager/get_file/350909?ver=3890)
- DasBender, G. (2011). Assessing generation 1.5 learners: The revelations of directed self-placement. In N. Elliot & L. Perelman (Eds.), *Writing assessment in the 21st century: Essays in honor of Edward M. White* (pp. 371-384). Hampton Press.
- Elliot, N. (2016). A theory of ethics for writing assessment. *Journal of Writing Assessment*, 9(1). <http://journalofwritingassessment.org/article.php?article=98>

- Evans, J. (2012). Structuring the color line through composition. *Open Words*, 6. <https://doi.org/10.37514/OPW-J.2012.6.1.02>
- Evans, J. (2018). To live with it: Assessing an accelerated basic writing program from the perspective of teachers. *The Basic Writing e-Journal*, 14(1). <https://bwe.cuny.cuny.edu/Evans.htm>
- Fischer, D., & Frey, N. (2013). Growing your garden of complex texts. *Educational Leadership*, 70(9). <https://www.ascd.org/el/articles/growing-your-garden-of-complex-texts>
- Gannett, C., & Brereton, J. C. (2020). Framing and facing histories of Rhetoric and Composition: Composition-Rhetoric in the time of the Dartmouth Conference. In N. Elliot & A. S. Horning (Eds.), *Talking back: Senior scholars and their colleagues deliberate the past, present, and future of writing studies* (pp. 139-152). Utah State University Press.
- Gere, A. R., Aull, L., Green, T., & Porter, A. (2010). Assessing the validity of directed self-placement at a large university. *Assessing Writing*, 15(3), 154-176.
- Harrington, S. (2005). Learning to ride the waves: Making decisions about placement testing. *WPA: Journal of the Council of Writing Program Administrators*, 28(3), 9-29.
- Hern, K., & Snell, M. (2013). *Toward a vision of accelerated curriculum & pedagogy: High challenge, high support classrooms for under-prepared students*. Learning-Works.
- Inoue, A. B. (2019). Chair's address: How do we language so people stop killing each other, or what do we do about white language supremacy? *College Composition and Communication*, 71(2), 352-369.
- Inoue, A. B., & Poe, M. (2012). *Race and writing assessment. Studies in composition and rhetoric*. Peter Lang.
- Integrated Postsecondary Education System (IPEDS). (2020). *Prairie State College*. National Center for Educational Statistics. <https://nces.ed.gov/collegenavigator/?q=prairie+state+college&s=all&id=148007>
- Kane, M. (2006). Content-related validity evidence in test development. In S. M. Downing & T. M. Haladyna (Eds.), *Handbook of test development* (pp. 131-153). Lawrence Erlbaum Associates Publishers.
- Ketai, R. L. (2012). Race, remediation, and readiness: Reassessing the "self" in directed self-placement. In A. B. Inoue & M. Poe (Eds.), *Race and Writing Assessment* (pp. 141-154). Peter Lang.
- Klausman, J., Roberts, L., Giordano, J., Griffiths, B., Sullivan, P., Swyt, W., Toth, C., Warnke, A., Williams, A. (2016). TYCA white paper on placement reform. *Teaching English in the Two-Year College*, 44(2), 135-157. [https://cdn.ncte.org/nctefiles/groups/tyca/placementreform\\_revised.pdf](https://cdn.ncte.org/nctefiles/groups/tyca/placementreform_revised.pdf)
- Lewiecki-Wilson, C., Sommers, J., & Tassoni, J. P. (2000). Rhetoric and the writer's profile: Problematising directed self-placement. *Assessing Writing*, 7(2), 165-183.
- Nastal, J. (2019). Beyond tradition: Writing placement, fairness, and success at a two-year college. *Journal of Writing Assessment*, 12(1). <http://journalofwritingassessment.org/article.php?article=136>
- Nastal, J. (2020, February 6). *Writing analytics and two-year college pedagogy* [Keynote address]. The 9th International Conference on Writing Analytics, St. Petersburg, FL, United States.

- Perelman, L. (2012). Mass-market writing assessments as bullshit. In N. Elliot & L. Perelman (Eds.), *Writing assessment in the 21st century: Essays in honor of Edward M. White* (pp. 425-437). Hampton Press.
- Poe, M., Elliot, N., Cogan, J., & Nurudeen, T. (2014). The legal and the local: Using disparate impact analysis to understand the consequences of writing assessment. *College Composition and Communication*, 65(5), 588-611.
- Poe, M., Nastal, J., & Elliot, N. (2019). Reflection. An admitted student is a qualified student: A roadmap for writing placement in the two-year college. *Journal of Writing Assessment*, 12(1). <http://journalofwritingassessment.org/article.php?article=140>
- Prairie State College. (n.d.) *Mission*. <https://prairiestate.edu/about-us/mission.aspx>
- Prairie State College. (2017). *2017-2020 Agreement: Board of Trustees of Community College District no. 515 and Prairie State College Federation Of Teachers, Local 3816, AFT, AFL-CIO*. <https://prairiestate.edu/faculty-and-staff/union-contact-information.aspx>
- Prairie State College. (2018). *Key performance indicators*. <https://prairiestate.edu/about-us/operational-departments/institutional-research/key-performance-indicators/index.aspx>
- Public Community College Act, Ill. Comp. Stat. ¶ 3-17 (1961 & rev. 2015). <https://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=1150&ChapterID=18>
- Rose, M. (2012). *Back to school: Why everyone deserves a second chance at education*. The New Press.
- Ross, K. A. (2016). *Breakthrough strategies: Classroom-based practices to support New Majority college students*. Harvard University Press.
- Saenkhum, T. (2016). *Decisions, agency, and advising: Key issues in the placement of multilingual writers into first-year composition courses*. Utah State University Press.
- Schendel, E., & O'Neill, P. (1999). Exploring the theories and consequences of self-assessment through ethical inquiry. *Assessing Writing*, 6(2), 199-227.
- Scott-Clayton, J. (2012). *Do high stakes placement exams predict college success?* (CCRC Working Paper No. 40). Community College Research Center
- Shor, I. (1997). Our apartheid: Writing instruction & inequality. *Journal of Basic Writing*, 16(1), 91-104. <https://doi.org/10.37514/JBW-J.1997.16.1.08>
- Slomp, D. (2016). Ethical considerations and writing assessment. *Journal of Writing Assessment*, 9(1). <http://journalofwritingassessment.org/article.php?article=94>
- Steele, C. (2010). *Whistling Vivaldi: How stereotypes affect us and what we can do*. WW Norton.
- Sullivan, P. (2008). Measuring "success" at open admissions institutions: Thinking carefully about this complex question. *College English*, 70(6), 618-632. [https://doi.org/10.1007/978-3-319-44284-6\\_29](https://doi.org/10.1007/978-3-319-44284-6_29)
- Toth, C. (2018). Directed self-placement at "democracy's open door": Writing placement and social justice in community colleges. In A. B. Inoue, M. Poe, & N. Elliot (Eds.), *Writing assessment, social justice, and the advancement of opportunity* (pp. 139-172). The WAC Clearinghouse; University Press of Colorado. <https://doi.org/10.37514/PER-B.2018.0155.2.04>
- Toth, C. (2019). Directed Self-Placement at two-year colleges: A kairotic moment. *Journal of Writing Assessment*, 12(1). <http://www.journalofwritingassessment.org/article.php?article=134>



- Villanueva Jr, V. (1993). *Bootstraps: From an American academic of color*. National Council of Teachers of English.
- White, E. M., Elliot, N., & Peckham, I. (2015). *Very like a whale: The assessment of writing programs*. Utah State University Press.
- Yeager, D. S., Walton, G. M., Brady, S. T., Akcinar, E. N., Paunseku, D., Keane, L., Kamentz, D., Ritter, G., , Duckworth, A.L., Urstein, R., Gomez, E.M., Markus, H.R., Cohen, G.L., & Dweck, C.S. (2016). Teaching a lay theory before college narrows achievement gaps at scale. *Proceedings of the National Academy of Sciences of the United States of America*, 113(24), E3341-E3348. <https://doi.org/10.1073/pnas.1524360113>
- Zaback, K., Carlson, A., Laderman, S., & Mann, S. (2016). Serving the equity imperative: Intentional action toward greater student success (Research report). Complete College America. <https://completecollege.org>