The Logics that Keep Developmental Education Alive in an Age of Reform

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Developmental education (DE) reform is a national phenomenon. Across the country, policymakers, reform networks, advocacy groups, philanthropic organizations, and others have called for fundamental changes in how institutions of higher education prepare students for college work (Jaggars & Bickerstaff, 2018). Community colleges are critical to this project because of their outsized role in providing DE to recent high school graduates as well as adult students (Bragg, 2001). Although DE approaches have differed over time (Arendale, 2011), in the current era, DE is synonymous with "pre-requisite remediation." Pre-requisite remediation is the sequence of pre-college courses (also known as DE or below-transfer-level courses; we use these terms interchangeably) into which colleges place students deemed "underprepared," based on an assessment of their reading, writing, and math ability.

Questions about the effectiveness, efficiency, and fairness of pre-requisite remediation started in the early 2000s and has grown in subsequent years as researchers used large data sets and causal statistical analyses to show that (a) the standardized assessment tests that most colleges rely on for placement inaccurately measure students' college readiness (e.g., Author, 2016); (b) measures such as high school GPA, grades, and coursetaking may better capture student readiness (Bergman et al., 2018); (c) placement in DE stymies progression to college coursework and completion (Valentine et al., 2017); and (d) current arrangements disproportionately impact Black and Latinx/a/o students (Xu, 2016). Additionally, qualitative studies cracked open the "black box" of the classroom and highlighted the prevalence of "basic skills instruction" that foregrounds procedural knowledge and discrete skill development over the critical thinking, conceptual complexity, and context-based learning generally expected in higher education (Cox, 2015; Grubb & Gabriner, 2013).

This research has informed the creation and implementation of evidence-based DE policies and reforms. State legislators have cited this research to motivate policies for improving college preparation and completion while reform groups have used it to design new approaches to DE. For example, in California, the empirical context for this study, the state assembly passed Assembly Bill 705 (AB705) in 2017, which mandated that the state's 116 community colleges use "multiple measures" (e.g., high school GPA, grades) for placement and increase the likelihood that students complete transfer-level English and math in one year (Cuellar Mejia et al., 2020). Another strand of reforms promotes "co-requisite remediation," which gives students supplemental, customized support as they take college English and math (Logue et al., 2019).

Evidence that DE reforms improve college course completion and mitigate outcome gaps is growing. For example, curricular reforms that minimize students' time in DE (e.g., co-requisite remediation, accelerated DE) in Tennessee (Boatman, 2021), the City University of New York (Logue et al., 2019), and Texas (Schudde & Keisler, 2019) have revealed positive completion outcomes for students, relative to those enrolled in traditional DE courses. These results, however, have not dampened arguments in favor of pre-requisite remediation. For instance, evaluations of Florida Senate Bill 1720, which in 2014 required all public higher education institutions to reform DE and to put placement decisions in students' hands, have consistently shown that students—especially Black and Latina/x/o students and those deemed as having lower levels of academic preparation—are more likely to complete college math and English in one year (Park et al., 2018; Park-Gaghan et al., 2020; Park-Gaghan et al., 2021). Yet, Nix et al. (2020) found that some practitioners lamented the loss of DE courses, arguing that: (1) some students need more time to master foundational skills before tackling college work; (2) even though only a handful may need pre-requisite remediation, community colleges are supposed to help students "[w]herever [they] are on the continuum" (p. 63); (3) the policy

troubles the democratic mission of community colleges; and (4) policymakers have prioritized efficiency towards completion over educational opportunity. These findings suggest that research showing pre-requisite remediation's negative impacts is not congruent with what those involved in implementing DE reforms observe on their campuses. And, in line with scholarship on the normative and interpretive aspects of policy implementation (Oakes et al., 2005; Spillane et al., 2002), these findings indicate that deep-seated beliefs—in this case, about institutional mission, practitioner work, and student success—influence practitioner thinking and response to policy.

We build on these insights and contribute to the scholarship on practitioner sensemaking and experience of DE reform. Our study took place in a multi-college district during the first two years of AB705 implementation. Similar to previous studies (Nix et al., 2020; Schrynemakers et al., 2019), our district-wide survey results and in-depth interviews with practitioners at three colleges revealed that not all welcomed the changes that AB705 sought, and that if given the chance, some would bring back now-retired DE courses despite promising evidence of improved outcomes (Authors, 2021; 2022). As reformers seek to make pre-requisite remediation obsolete, it is critical to understand how practitioners regard DE reforms that disrupt the status quo and mandate changes that may contradict their beliefs about what students need for success in college and beyond. Further, as reformers rely more on research to motivate and design policies, it is important to explore the limits of data and evidence to catalyze policy adoption and practice reform at the ground level, as well as to consider whether and how substantive, transformative change requires a restructuring of beliefs (Spillane et al., 2002). Since educational institutions are value-rational organizations and practitioners are value-rational actors, a study that foregrounds the interaction of policy, organization, and practitioner values should generate insights into why efforts to advance student success and equity in community colleges—through DE reform and otherwise—are politically and socially fraught (Witham et al., 2022).

For these reasons, we aimed to get "under the hood" of prevailing DE practices and practitioners' regard for them within the context of AB705. We did so by investigating the "logics" that underlie study participants' arguments for DE, which enabled us to unpack what DE means and why it matters to them, and how their conceptualizations of what they should do is tacitly influenced by ideas, norms, and assumptions that are bigger than themselves (March & Olsen, 2008). According to organization scholars, logics are akin to organizing templates or principles that encapsulate the ideational, normative, and cultural expectations that shape how people make sense of daily life, approach their work, and regulate actions and behavior (Thorton & Ocasio, 2008). At the same time, logics draw attention to the agency of individuals to negotiate ideas and principles that guide their work (Witham et al., 2022; Woulfin & Weiner, 2019). A logics approach thus allowed us to position practitioners as agentic actors who were actively weighing the opportunities and consequences of DE's demise against policymaker demands for improved student success and equity, community colleges' access and opportunity mission, and taken-for-granted professional norms of how to best prepare students for college work. It also enabled us to investigate how policies like AB705 can transform problematic structures but leave intact practitioner beliefs and thinking that may work against policy goals and stymie implementation. Policymakers and reformers who do not work on a campus often have a limited understanding of the cognitive and normative factors that shape ground-level responses to reforms. Identifying and describing practitioners' DE logics can help bridge this gap in policymaker knowledge and help them see that deinstitutionalizing DE, which has long been a core community college function, is not an easy task. Awareness of DE logics can inspire reformers to craft additional actions and strategies that are sensitive to practitioner rationalities and concerns, while moving toward policy goals.

In what follows, we first discuss AB705, describing its features and showing why an empirical analysis of DE logics is needed to understand why a mandate for DE reform and evidence of DE reform efficacy are not always enough to shake practitioner commitments to pre-requisite remediation. We then describe our larger mixed-methods evaluation study of AB705 in one multi-college district, from which we drew the interview data for this paper. Our analysis of interviews with practitioners involved in implementing AB705 at three colleges was organized to answer two research questions: (1) How did practitioners view AB705? (2) What logics did practitioners invoke when talking about DE? In the first part of our findings section, we illustrate the spectrum of AB705 among our participants, which ranged from those in favor of and those opposed to the policy. In the second part, we show participants' rationales for DE coalesced around three underlying DE logics: (1) basic educational competency; (2) educational opportunity; and (3) choice. Our paper closes with a discussion of our findings and implications for policy, practice, and research.

Theoretical and Empirical Grounding

To situate our study, we first describe the policy context, highlighting how AB705 aimed to disrupt the current order of college preparation in the California Community Colleges (CCC), the largest community college system in the country. We show that AB705 addressed structural barriers created by test-based placement and pre-requisite remediation, but not the beliefs and values that allowed test-based placement and pre-requisite remediation to persist despite research challenging their utility and legitimacy. We argue that these ideational elements should be examined and propose to do so using a "logics" approach.

AB705: A New Regime for Preparing Students for College Work

Hailed as a "landmark reform," the passage of AB705 in the fall 2017 represented a turning point for DE in the CCC (Cuellar Mejia et al., 2020, p. 7). Motivating AB705 was the

idea that students are capable of succeeding in English and math courses that count for a baccalaureate degree (hereafter "transfer English and math"), contrary to what assessment tests suggest (California Legislative Information, 2017). According to the state legislature, the problem was that colleges were allowed to "block students" from these courses, which then impacted timely attainment of educational goals. The solution was to limit DE courses, increase placement in transfer English and math based on measures of student potential, and expand concurrent supports, including co-requisite and tutoring support. To argue for these changes, the legislature cited data (e.g., "California's community colleges identify more than 75 percent of its students as underprepared"); research studies (e.g., "A 2016 report by the Public Policy Institute of California found that California community colleges still use placement tests extensively"); and field results from pilot reform efforts (e.g., "The system's Multiple Measures Assessment Project and Common Assessment Initiative have conducted deep and research- driven work on the use of high school performance to greatly improve the accuracy of the placement process").

A mandate, AB705 establishes new "rules of the game" (North, 1990, p. 3) for DE. By fall 2019, rather than assessment testing, colleges had to use one or more measures of high school performance (e.g., grades, coursetaking, GPA) for placement. Whereas colleges were not previously held accountable for students' timely completion of transfer English and math courses, now they had to "maximiz[e] the probability that a student will enter and complete" these courses within a year of initial enrollment—a metric called "throughput" (California Legislative Information, 2017). AB705 did not stop colleges from offering DE courses, but colleges had to prove that students would be "highly unlikely" to complete transfer English and math in one year without first taking DE courses. Thus, although DE courses could stay, their place in an AB705 world was shrinking, and while not mandated, AB705 strongly encouraged colleges to adopt concurrent developmental support models (Cuellar Mejia et al., 2019).

As an "authority tool," implementing AB705's mandates turned on practitioner respect of the legislature's authority and willingness to follow the policy's new rules for DE (Schneider & Ingram, 1990). Analyses of the first semester of implementation (fall 2019) suggest that AB705 was working: compliance was high; changes were made; students were benefitting. Most colleges used high school GPA and course-taking for placement, with close to all first-time-in-college students placed in transfer English and a majority in transfer math, on average (Cuellar Mejia et al., 2020). Enrollment in DE courses fell dramatically as had the number of such courses offered, while the use of co-requisite models rose significantly (Hern et al., 2020). Students who received co-requisite support completed transfer courses at a higher rate than those who started in pre-requisite courses (Cuellar Mejia et al., 2020). In short, AB705 spurned changes that have improved student outcomes across the board. That said, Black students still experience lower access to transfer math, as well as lower completion rates. Access disparities for Latina/x/o students have minimized, but like Black students, there remains a gap in transfer course completion between Latina/x/o and white students. Similar patterns were evident in the multi-college district that was the site for our study (Authors, 2021).

New DE Rules, Old DE Beliefs?

With AB705, the CCC is ostensibly in a "new era of student access" (Cuellar Mejia et al., 2020). As colleges replace old DE practices with evidence-based approaches, one might say that practitioners, faculty in particular, have shifted their beliefs and assumptions about how to prepare students for college work. However, Trinidad's (2022) study of AB705 implementation at two colleges showed that practitioners were split between "advocates" who believed the policy empowered students and advanced access and equity, and "opponents" who believed the policy set students up to fail because it limited pre-requisite remediation. Results from a survey we administered at our district site in Spring 2022—two years into implementation—found

widespread recognition of changes to placement procedures, counseling practices, student supports, curriculum, and pedagogy, but also that many English and math faculty maintained a belief that below-transfer-level courses developed students' college readiness (Authors, 2022).

New institutional theory (NI) scholars have argued that while change can happen in highly institutionalized fields like higher education, the process of delegitimizing old, and legitimizing new, practices and ideas is challenging (Greenwood & Hinings, 1996). That AB705 was not introduced out-of-the-blue but followed a decade of state policy and grassroots efforts to reform DE (Mejia Cuellar et al., 2020) should have laid the groundwork and made its acceptance a foregone conclusion. Yet, early implementation studies demonstrate that this has not necessarily been the case (Trinidad, 2022). The fact is that AB705's mandates charged colleges to address problematic structures and procedures; however, the mandate did not directly tackle the cognitive, cultural, and normative dimensions of organizational life that are equally important for abandoning old ways of thinking and doing and institutionalizing new ones (Oakes et al., 2005; Scott, 2007). For example, AB705 limits whether and under what conditions colleges can offer DE courses, however, it does not contend with the fact that the legitimized form of college preparation is pre-requisite remediation, that it has long been part of community colleges' comprehensive mission, and that as a result, it is core to what makes a community college a community college (Bragg, 2001, Nix et al., 2020). AB705 also aims to eliminate racial inequities in placement and enable more students of color to start directly in transfer English and math, yet the policy offers little if any resources to destabilize racialized beliefs about who is "college ready" and to reframe racialized expectations of who belongs and can succeed in a college classroom (Trinidad & Felix, 2022). As much as AB705's impact has been on changing the structure of DE practices and advancing student outcomes (Cuellar Mejia et al., 2020), it is thus less clear whether and how practitioners have let go of established ideas about DE.

A Logics Approach

Educational scholars, particularly those concerned with implementation fidelity and the effects of structural inequality, have shown that what and how practitioners think have material consequences for the achievement of policy goals (Spillane et al., 2002), practitioner judgment and decision-making (Posselt, 2015), and the realization of equitable outcomes, experiences, and opportunities for minoritized students (Maldonado, 2019; Trinidad, 2022). For example, Maldonado's (2019) pre-AB705 study found that counselor beliefs about ability differences between white students (assumed to attend academically rigorous high schools, hence deserve transfer-level placement) and Latina/x/o students (assumed to face language, culture, and academic support barriers, hence need remediation) impacted placement decisions in two community colleges in California. Crucially, these scholars point to the connection between individual belief and practice patterns, and prevailing paradigms, epistemologies, and theories in a field. Beliefs such as those in Maldonado's (2019) study, therefore, cannot be divorced from ideological assumptions about a racialized hierarchy of intelligence that replicate across institutions, educational and otherwise (Ray, 2019).

Organizational scholars developed the notion of "logics" to investigate the relationship between the macro (world views, paradigms, epistemologies) and micro (individual judgment and action) (March & Olsen, 2008; Thornton & Ocasio, 2008). Education policy scholars, in turn, have used logics to explore how practitioner negotiation of "multiple, competing structures and conceptualizations can help explain reform challenges" (Woulfin et al., 2022, p. 14). According to Scott (2007), logics encapsulate the "belief systems and associated practices that predominate in an organizational field" (p. 170). Analytically, they are useful for examining how socially constructed "models of rationality" bound what people in a certain time and place deem (un)acceptable, (ir)rational, (in)appropriate, (il)legitimate, and (im)possible, as well as for

analyzing the rules, standards, and criteria upon which the evaluation of qualities like college

readiness and need for DE are based (Posselt, 2015, p. 824; Rigby, 2014). For example, the

belief that student success is the product of individual effort, motivation, and engagement

prevails in higher education (Bensimon, 2007)—community colleges included (Maldonado,

2019)—and grounds common "success" strategies in remediating student deficits (e.g., help

students become better test-takers) rather than problematic policies and procedures that constrain

opportunity (e.g., eliminate the assessment test) (Author et al., 2020; Author et al., 2021).

In this paper, we took a logics approach to better understand practitioner beliefs in favor

of DE during the first two years of AB705 implementation. Logics allowed us to analyze how

participants' sense of DE did not necessarily align with the perspectives of those who work

outside their milieu (Posselt, 2015). Examining logics may be especially consequential during

the early days of reform, which can be seen as a transitional period in which new ideas are not

yet fully embedded and pre-reform ideas continue to exert a powerful hold. To ground our sense

of the possible ideas that might animate practitioner adherence to DE, we drew on scholarship

about the historical and contemporary use of DE in higher education. Based on that review, we

identified five rationales for DE that have developed over time:

- *Educational standards*: DE is needed to bridge the gap for students who do not have the
  knowledge and skills for college work and helps build the reading, writing, math and
  study skills to ensure students' future success (Arendale, 2011; Boylan, 1988; Boylan &
  White, 1987; Bragg, 2001; McCabe & Day, 1998).

- *Educational opportunity*: DE is critical for expanding access to higher education,
  especially in open-access institutions like community colleges that enroll students with a
  broader range of academic experiences and college preparation (Boylan, 1987; Boylan &
  White, 1987; Bragg, 2001; McCabe & Day, 1998).

- *Compensatory education*: DE is required to rectify structural inequalities in K-12 schooling that have denied racially minoritized students and/or students attending low-resourced schools from a quality education (Arendale, 2005). Accepting all students means that community colleges need to provide DE to compensate for the education students did not receive in high school (Bettinger et al., 2013).

- *Civic and workforce development*: DE is needed to prepare students to meet civic and workforce needs (Arendale, 2011; Boylan, 1987; Boylan & White, 1987). Policymakers have long charged community colleges with providing an education that fosters democratic and labor participation (Bragg, 2001), and DE serves community colleges' liberal arts / transfer and career / technical curricular missions by developing students' knowledge and skills to pursue those goals (McCabe & Day, 1998).

- *Student choice*: Based on a self-assessment of their knowledge and skills, students should have the option of taking DE courses to achieve their desired level of mastery (Arendale, 2005; 2011). The institutional identity of being open access, of advancing educational opportunity, and of being many things to many people bolsters the impulse to give students the choice of DE to meet their self-determined goals.

These five DE rationales constituted our analytic starting point. Since practitioners are nested in complex organizational, social, and historical contexts, other logics such as those tied to their discipline and profession could also be at play (Posselt, 2015; Woulfin et al., 2022). For example, math's epistemological grounding in positivism could give way to a "disciplinary" logic that guides math faculty to continue valuing placement test scores as a legitimate measure of student potential for college work despite their imperfections (Author et al., 2021). Also, faculty autonomy and responsibility over teaching and learning are legitimized norms in higher education, and in the CCC, they are institutionalized in the statewide definition of faculty and

academic senate responsibilities, known colloquially as the "10+1."[1] These norms could fuel a "professional" logic that encourages faculty to believe they should have the main, or even sole, voice in determining curriculum, including whether and why DE should stay or go. We inductively derived such logics in our analysis and examined how practitioners drew on them to argue why pre-requisite remediation should stay.

Methods

This paper is part of a larger mixed-methods evaluation of AB705 implementation in a multi-college district, conducted under the auspices of a research-practice partnership (RPP) between the district office and a university-based research team. Our data include student transcript and outcomes data, a district-wide survey of AB705 implementation, interviews with district administrators, interviews with practitioners involved in implementing the policy at three colleges in the district, and AB705-related documents from state, district, and college sources. For this paper, we drew on the interviews from our three case schools. We designed a semi-structured protocol to explore AB705 implementation at the college-level, as well as practitioner perspectives about AB705 and beliefs about DE.

Case College, Participant Selection, and Interviews

As our study is part of an RPP, we conferred with district partners about focal college selection, seeking their advice on which campuses would help us develop a multi-faceted understanding of AB705 implementation in the district. Consideration was given to student enrollment size and racial/ethnic composition; curricular focus (e.g., transfer / liberal arts, career and technical, adult education); reform culture (e.g., more innovative or more traditional in terms of curricular and pedagogical reform); and likelihood of access. The research team reached out to the campuses on the shortlist and received affirmative responses from three. One college is the largest in the district, with an enrollment roughly double the other two colleges. All three enroll

more students of color than white students, with Latina/x/o students comprising the largest racial/ethnic group across the board. Two have a reputation for being more transfer / liberal arts focused, while the third is more geared towards career and technical education. The math department at one college is regarded as being innovative, curricularly and pedagogically.

As with selecting the case colleges, we consulted with the district about who, by campus role, was likely to be involved in or who supported implementation in some way. Based on this criterion, we reached out to the vice presidents of instruction and student services; the deans over English, math, and counseling; the English, math, and counseling department chairs; institutional research and assessment and placement staff; and campus academic senate leaders. We also pursued snowball sampling, which enabled us to identify instructors and counselors to interview. In total, we interviewed 30 practitioners, 24 of whom were directly involved with implementing AB705 and whom we included in the analysis for this paper. Our participants included 5 deans, 13 instructors, 4 counselors, and 2 staff members. Among them, 7 were Latina/x/o, 5 Asian, 2 multiracial, 1 Black, and 9 white. Nine of the participants were women and 15 were men. Over half have worked at their institutions for more than 10 years (n=13), with the shortest tenure being 2 years (n=2) and the longest being 24 years (n=3).

[Insert Table 1 around here]

All interviews were conducted in spring and fall 2021 via Zoom. Each interview lasted about an hour and was recorded and professionally transcribed. We anticipated that participants would have different implementation experiences based on their role (e.g., math professor vs. administrator), thus, we developed two interview protocols, tailored by role category (i.e., math/ English/counseling faculty and administrators). The protocols shared similar base questions (e.g., What are the main responsibilities of someone in your position? From your perspective, what problem does AB705 address?), but we designed the protocol for teaching faculty to probe

deeper into course loads, pedagogy, and experiences with teaching before and after AB705. During interviews, we took detailed notes and reflected on issues and themes that came up.

Analysis

Our analysis occurred in multiple stages. First, we coded interviews in the qualitative software program, Dedoose, using a codebook that captured descriptive themes related to logics and implementation (e.g., assessment and placement, developmental education, disciplinary logics). This initial coding allowed us to identify the data most relevant for our analysis. Using the coded interview data, we wrote memos for each participant, describing their perspectives on AB705, pre-requisite remediation, assessment and placement, and concurrent supports. Through memoing, we got a sense of how participants justified the existence or elimination of DE and the elements that factored into their beliefs and assumptions. We also ascertained whether and how participant thinking aligned with the rationales for DE discussed above, and whether other logics (e.g., around professional norms) influenced their perspectives. From the memos, we created data matrices (Miles & Huberman, 1984) to visualize participant views about AB705 and the rationales undergirding their arguments for and against DE. Having identified the DE rationales, we considered whether they combined and resulted in particular patterns of thinking. This last stage of analysis helped us identify three logics with which participants wrestled about pre-requisite remediation.

Findings

As noted, AB705 sought to increase the number of students placing into and completing transfer-level English and math courses in California's community colleges. The policy pushed for but did not outright mandate the discontinuation of student placement in DE courses. Advocates hailed AB705 as promoting and advancing educational equity for all students (e.g., CAP, 2019). To facilitate its implementation, the district prevented colleges from scheduling for-

credit DE courses two or more levels below transfer, starting in fall 2019. Just as proponents of

AB705 saw the policy as promoting equity, some participants viewed the policy as a reversal of

equity-driven practices. In the first section, we describe participant perspectives on AB705, as

shared in spring 2021. Participants championed different facets of the policy and criticized

others. Even the most critical expressed some support of AB705's call to move away from test-

based placement and towards multiple measures placement. Most, including those who strongly

supported the policy, critiqued aspects of its implementation—particularly in their own district—

around the reduction of DE courses from the curriculum. In the second part of our findings, we

present the three defining logics that undergirded their defense of DE: (1) basic educational

competency; (2) educational opportunity; and (3) choice.

AB705 Perspectives: Between an "Opportunity" and "Making Things Worse"

At our case schools, practitioners began the work of complying with AB705's directives

after the governor signed the bill in fall 2017, in preparation for full implementation in fall 2019.

During this two-year period, many of our participants were deeply involved in coordinating and

facilitating their college's response. For example, the English and math department chairs, along

with some long-tenured faculty, organized faculty working groups to attend conferences on

AB705 implementation; revised placement procedures and guidance; and developed new or

modified existing curricula, curricular sequences, and academic supports. The district survey that

we conducted as part of the larger study found that over 90 percent of respondents identified

department chairs as a primary source of information about the policy (Authors, 2022). Some

deans played a similar coordinating role, while others supported their chairs and faculty by

providing stipends for faculty or engaging in troubleshooting conversations. While some of the

instructors and counselors in our study did not think they were instrumental in planning and

designing their college's AB705 response, they were nonetheless involved in implementation

(e.g., by teaching the new or modified courses, enacting new placement guidelines). Several participants were also routinely engaged in district-level discussions about AB705, either because they were a campus academic senate leader or because they served on a district council.

[Insert Table 2 around here]

AB705 was thus a significant matter for our participants, about which they held strong views and feelings two years into full implementation. We summarize the spectrum of AB705 perspectives in Figure 1. Some regarded the policy as an "opportunity": (1) for students, especially students of color, to access higher education and complete the courses to transfer to a baccalaureate institution (Nicole, dean, College 2); (2) for instructors, to rethink the "custom of teaching in a traditional manner," which is "not effective in all classes" (Lauren, math instructor, College 1); and (3) for institutions to eliminate the assessment test and the "leakage points" that "ke[ep] them out of transfer level" (Rebecca, staff, College 3). Participants in this camp argued that the policy assumes that students are "capable" (Gigi, counselor, College 2), should close equity gaps for Black and Latina/x/o students (Frank, dean, College 1), and mitigates the systemic bias in test-based placement and pre-requisite remediation "that got us to AB705 in the first place" (Nicole, dean, College 2).

On the opposite end of the spectrum were participants who saw AB705 as "making things worse" because it (1) allows students to "bypass skillsets that are needed"; (2) will not "clos[e] any equity gaps" (Aaron, math instructor, College 2); and (3) eliminates the DE courses that serve as a "safety net" and "bridge" to transfer-level courses (Nadav, math instructor, College 2). Among our participants, only instructors expressed negative views of AB705. Most agreed that basing placement on a standardized test was problematic, but so was relying on high school GPA and coursetaking. Rory, an English instructor at College 2 noted, GPA could "indicate maybe how well a student … can do, what work they're willing to put in" or it might not since some

students "were just bored in high school" and once in college, they excelled. Several math instructors suggested GPA was not a trustworthy measure of student capacity because curricula vary across high schools, with some offering coursework up to calculus and some not. Even as they admitted that DE worked for some and not others, they asserted that AB705 eliminates the time students might need to comfortably prepare for transfer-level courses.

In the middle were two participants—a dean (Sally, College 3) and an English as a Second Language instructor (Shin, College 1)—who did not clearly express whether they were for or against AB705. Notably, Sally's thoughts on the policy were contingent on what placement and completion data—in the pre- and post-AB705 era—suggest. She described AB705 as "a study," the findings of which could show that DE courses help or hinder "certain groups of students." Without data, this dean did not dismiss test-based placement nor pre-requisite remediation, nor did she argue for their maintenance.

That our participants expressed a range of perspectives on AB705 was unsurprising; past research has shown that practitioners often interpret policies they are tasked with implementing in different ways (Spillane et al., 2002). Furthermore, given arguments in the state policy environment for (e.g., CAP, 2019) and against (e.g., Bruno, 2017) AB705 and the elimination of pre-requisite remediation, divided opinion at the local level was a reasonable expectation. What was puzzling, however, was how our participants—even those in favor of AB705—suggested that DE courses have some purpose and value. To address this puzzle, we analyzed the logics for DE and pre-requisite remediation specifically, which we present next.

The Logics Keeping Developmental Education Courses Alive

Participants' arguments for DE courses echoed what scholars have previously written about the historical and contemporary value for DE (discussed above), as well as reflected ideas from professional, policy, and disciplinary sources that we discerned inductively. All participants

shared at least two reasons for why pre-requisite remediation should stay in some form. In Table 2, we provide a count for each rationale, disaggregated by participant role.

[Insert Table 3 around here]

Basic Educational Competency

Participants first and foremost argued that students need basic educational competencies in English and math to be successful in their education and careers, and to be productive members of society. DE courses were essential for this purpose. Their arguments were grounded in three rationales for DE: (a) compensatory education and bridging educational standards; (b) sequential learning; and (c) civic & workforce development.

Compensatory Education and Bridging Educational Standards. In defending DE's preservation, participants argued that pre-requisite remediation was necessary because of the structural inequalities in K-12 schooling that resulted in students being denied the opportunity to develop key English and math skills. Given this reality, community colleges must provide DE to bridge the skill gap and compensate for the education that students never received. Participants repeatedly referenced the uneven education quality across public high schools from which their students come: "different high schools have different standards," said Frances, the math chair at College 1. Moreover, because of this uneven quality in education, many practitioners had little trust in the new placement process of relying on high school GPA and grades without additional guidance from assessment test scores. A dean at College 2, Nash, noted that his math faculty did not trust students' high school transcripts because "there is such a wide variance in the quality of courses that are taught at various high schools" and they believed that "GPA and grades don't really tell the whole story." Participants further distrusted the high school curriculum because of its fixation on standardized testing rather than critical thinking. With a focus on rote knowledge,

many students left high school unprepared, for college work. Adrian, an English professor at College 1, described the predicament in the following way:

> Oh, I think it [AB705] hurts any student who went to a public school that was not in an affluent area. I think it's just what it boils down to. If, you know, any student who is from a working-class neighborhood, so the school's going to be underfunded thanks to Prop. 13, and who pretty much was probably just pushed through the system without really having learned as much as they needed and were never taught how to be academically engaged. I think they're the ones who get hurt the most.

The responsibility of getting students college ready thereby fell on them, a situation which Ennis, an English professor who worked in the same department as Adrian, summarized as: "If a student finishes high school, but doesn't have basic skills, *what is left for them*? ...community colleges, that's the *only* place left" (italics added). Ennis and other participants worried that eliminating pre-requisite remediation would limit students' post-high school plans and exacerbate the inequalities in their educational opportunity.

Sequential Learning. Although participants did not fault students for the gap in their knowledge, they believed that the gap must be bridged for students to experience academic success. Instructors touted the notion that learning occurred in a sequential manner, first requiring a mastery of basic skills. Andie, a leader of College 3's academic senate said that DE courses exist to "stack those bricks." Math instructor Aaron (College 2) expressed concern about the importance of the math sequence and having the appropriate skills to do well. Having taught math "for a very long time," he has found that

> the biggest issue for people that have problems with algebra is arithmetic. And if you don't know arithmetic, then you're not going to do well in algebra. If you don't know algebra, you're not going to do well in calculus, so you're going to have problems.

Aaron's colleague in English, Rory, believed the one-level-below-transfer English course helped students develop the "socialization" and "study skills"—for example, "how you actually have a conversation with a group"—that are typically expected in English 101. She conveyed that if the department could "bring back" this course or "it's equivalent, … we'd do so."

Instructors across our case sites noticed that students in their transfer-level courses, post-AB705, have not mastered the "prerequisite material" and worried about the long-term impact on their performance in upper-level courses. Math faculty were especially concerned about students pursuing STEM. In particular, they worried that AB705 allows STEM-aspiring students to enroll in transfer math courses whether or not they are prepared, and if they perform poorly in the course, they may be deterred from pursuing STEM. This concern was shared by others such as Frank, a former dean at College 1 who fully supported AB705 but also felt that the policy "has really hurt students' access to the STEM fields. … [C]ertainly an F in calculus when you're finally convinced to try STEM and imagine yourself as an engineer or a scientist, … it can be even more sort of soul crushing to the overall outlook for those students." These participants argued that if students had the option of taking DE before entering transfer math, then they would be better prepared for subsequent courses in STEM.

Civic & Workforce Development. Finally, several participants expressed trepidation about students not having basic English and math skills for their careers and saw DE as essential for preparing students to meet civic and workforce needs. While they did not cite scholarship on this point (e.g., Bragg, 2001), they said community colleges have a responsibility to address a broad range of student interests, not only transfer. For example, math chair Steven talked about the career and technical education program at College 3, which housed "a lot of people who are not here to transfer," but "to pick up a skill" or take "trade courses" required by their job. He pointed to the example of a drafting course in the engineering department, the pre-requisite for

which is geometry. "Geometry is off the books" with AB705, he explained, so when drafting instructors ask what he can recommend as a substitute, Steven says, "I have nothing for you because we got rid of that class in the sequence." While Steven was in favor of AB705, cases like this showed him that the policy is also restricting College 3 from serving all students. For Aaron (math instructor, College 2), AB705 is so focused on making the pathway to completion more efficient at the expense of student mastery concepts they will need for work.

> If a student goes through and let's say they take a [transfer-level] course with an instructor and for whatever reason … the instructor passes them—sometimes those things happen—that student has bypassed the needed skills. They may need them, for example, to take these public sort of civil service jobs… Even to work in our district as a classified employee, you have to pass [a] test and that has some math skills without calculators. So, we're giving degrees to students who can't even pass the [test] to work as a classified worker. And I see that as a problem.

Aaron and other instructors viewed pre-requisite remediation as providing foundational knowledge students need in whatever career they pursue. Allowing students who need a refresher to bypass these skills only hurts students and ultimately, the state's future workforce.

Upholding Educational Opportunity

In addition to basic educational competency, participants associated rationales for DE that spoke to a logic of educational opportunity. They argued that DE courses are a way that community colleges fulfill their open-access missions and serve as a "preventative medicine" against educational malpractice. Taking them away, therefore, hinders educational opportunity and equity, the goals around which AB705 is grounded.

Open-Access Missions and Educational Opportunity. Participants who held mixed or negative views of AB705 said the policy belied the democratic mission of community colleges.

Community colleges, historically and currently, have expanded access to higher education and are supposed to enroll students from all educational backgrounds and preparation; they do not turn anyone away and are expected to serve the academic needs of a variety of students (Bragg, 2001). Andie (instructor, College 3) called community colleges "the last bastion of social justice" because "we take everyone on planet Earth. … Anyone can come to our colleges and have any goal … and we will do everything in our power to get them there." Similarly, English professor Ennis (College 1) described community colleges as "accessible for the public" and not "an exclusive environment" like four-year institutions. All participants took pride in working for a community college. Ennis hailed its staff as "bleeding heart idealists" who only "want to help people" in carrying out its mission. The push to place students into transfer-level coursework violated this responsibility. Because community colleges serve all students, some students may need pre-requisite remediation to advance their education. Forcing students to take transfer-level classes when they may not be emotionally and academically prepared was, in Steven's (math instructor, College 3) words, "not serving a part of our population by being so restrictive."

Preventative Medicine Against Educational Malpractice. Almost all the instructors we interviewed also viewed DE as a form of what we call "preventative medicine" that provided students with the help to survive and potentially thrive in college courses. In Ennis's (instructor, College 1) words, "AB705 is a little bit dangerous" for students who have not mastered basic skills "[b]ecause you're expecting them to take on more actually than what we would expect the average first-year student." DE gives students time to "practice [the] basic skills skillset," whereas direct placement into transfer-level courses would make their first class "abnormally hard" because they "need to do more." Under AB705, such students are "brutalized" and they may end up performing worse in the course, doubting their abilities, or dropping out entirely. This echoes the concern of instructors about STEM-aspiring students shared above. In both

cases, DE courses are seen as a form of preventative medicine that gives students the option to ease into the college curriculum, which provides them with a safe landing, and allows them to avoid feeling demoralized by the unexpected rigor of college courses in their first semester of college. Adrian (instructor, College 1) amplified this sentiment, saying, "[D]ata that everyone knows is that if a student fails they are less likely to come back and try again. Especially that first semester. Getting them to succeed that first semester is critical to retention." Ennis contemplated the issue of first-semester retention against the backdrop of AB705: "It doesn't give them as much breathing room to get their bearings at the start of school. Which is funny because AB705 has identified the start of school as a predictor…So, the irony of that is a little sharp."

Many English and math instructors across the colleges shared that AB705 in particular hurt students of color and students with disabilities. Even though this was not the policy's intention, their perspectives suggest that AB705 is guilty of educational malpractice. According to Steven (math instructor, College 3), "[N]o one should have been taking five to six math classes below transfer before trying to take transfer level math," however, "by making this change around equity, we've created an inequitable system because we're seeing our Black and Brown students not succeed in those classes." Aaron (math instructor, College 2) similarly asked, "So, what happens to some of these students of color … when they start to fail in these courses? What do they do? Do they persevere, do they come back? What do they do?" Facing "some insurmountable tasks," students may not continue their education" and this, to Aaron, was the "dark side" of not having DE courses. More pointedly, Ennis shared that the policy was a "misinterpretation of the equity narrative" and a "misapplication of social justice," while Rory (English instructor, College 2) said, "[I]t's not equitable to pass a student along without a skillset. … That could be a form of racism." Such participants saw community colleges as

responsible for serving all students and removing DE punished students, hurting them in the long run. This was the greater inequity, a dereliction of institutional responsibility to the community.

Choice

AB705 came down as a mandate, but with its implementation largely left to local control and discretion, conversations around how to best implement the policy (e.g., Which classes, supports should be offered?) dominated faculty and district meetings. As mentioned, the district decided to not schedule courses two or more levels below transfer, which caused great consternation among faculty and staff. The final logic that governed practitioners' beliefs about DE was choice. We found two rationales guided practitioners' thinking in determining who gets to make what decisions and what those decisions should be when it comes to implementation: (a) DE is students' choice, and (b) DE is the faculty's purview.

Student Choice. Most participants who advocated for DE courses rallied behind the idea of honoring student choice. Although AB705 stipulated students' right to self-placement into transfer-level courses, they argued the opposite: students should have the right to self-place into DE courses. If students choose to enroll in DE courses based on a self-assessment of their knowledge and skills, they should be allowed to do so. As Frances (math instructor, College 1) explained, "Some students, they do want to take the transfer-level course so that they could move their academics faster. But some, they would like to strengthen their skills and we are taking their right to do so." Nadav, the math chair at College 2, felt similarly, arguing that students who choose to take DE courses "know that it might take them longer, but it's their choice. They've got a plan for themselves, and they know what level they might have to start with." While neither Frances nor Nadav were big proponents of AB705, Rebecca, a staff member at College 3, welcomed the policy and understood why the district moved to not schedule courses two or more levels below–courses that she likened to "a death sentence" and "hunger games." Regarding

placement, she argued that practitioners are prone to "unconscious bias" as they advise students and not offering DE courses was a clear way of mitigating the "danger" of this bias. But while taking "the choice away from us [practitioners] makes sense," she explained that student should be allowed "to take the courses that they need, that they feel that they need, that they've placed themselves in, that they decide they want to take in order to prepare them for that transfer level course." Rebecca concluded, "[T]o take the choice away from the students to me feels very wrong," and ultimately saw the district's decision as overreach, an exertion of authoritative control. This feeling was shared by Rebecca's colleague Victor (English instructor). He said that his faculty chose to "keep our remedial courses on the books so that if a student came in and wanted to take them, they could. It was not a requirement. There was no placement procedure." And if enrollment did not make, then the department would cancel them." To Victor, the district's action of taking out "all of our sentence and paragraph classes" was "completely authoritarian."

The counselors we interviewed, all of whom eagerly embraced AB705, framed student choice for DE courses as part of their professional obligation to "do no harm." They viewed their job as presenting students with the options and empowering them to be able to make the decision best suited for their needs. George (counselor, College 1) said his job "is about helping [students] see those options and then try to find one that works best." Showing students the options meant having DE available. He explained, "There are students that even after you give them a full explanation on here's college-level, here's non-college level, here's this, here's that, they are still choosing to place in the levels that they choose, that they're placed in." He firmly believed that students can "succee[d] at a higher level based off their choices," which could include taking a DE course. Another counselor, Gigi (College 2), underscored this point: with students, "it's always a conversation," regardless of "what the assessment says." She shared:

I'm always going to ask the students if they feel like their placement is correct, because sometimes you will get students who feel like, "I don't think I can start in transfer level. I haven't taken math since junior year and I need a refresher." "Okay, then let's start you in Math 125, that's okay." Or the other way around, some students are, "I'm in pre-calc right now. Why didn't I place into transfer level?" And then I have them challenge it.

GA appreciated AB705's emphasis on self-placement and believed it gave students more autonomy. While counselors were less vehement in advocating for pre-requisite remediation relative to instructors, they agreed that students have the right to take DE courses.

Faculty Purview. Most instructors defended the faculty's right to design curriculum, which included the decision to offer DE courses. Faculty viewed the elimination of pre-requisite remediation as a violation of the California Code of Regulations, of which Title 5 §53200 states that the academic senate has purview over "academic and professional matters," the first of which is "curriculum including establishing prerequisites and placing courses within disciplines." The district's edict to get rid of all DE courses more than one-level below transfer "without the consultation of faculty" was "a mistake in policy implementation," Rebecca (staff, College 3) argued and an encroachment on their professional responsibilities. In the many years Andie (instructor, College 3) has worked in the district, she does not recall a district decision that impacted curriculum in this way. The decision was "most outrageous" because "curriculum and student access and success really belon[g] in the hands of the faculty," as stipulated by Title 5. Beyond the Title 5 regulation, faculty felt they had the expertise and experience to make such decisions because they were the ones on the ground interacting with students daily and had authentic insight into what students were going through. This included firsthand evidence that some students were not prepared for transfer-level courses and needed DE. Frances (math instructor, College 1) estimated that 40-50 percent of students in her classes were not

academically prepared for the material, which hindered everyone's learning in the class. Her colleague, Ennis, made a similar comment about his English 101 courses. Observing students' academic struggles, both Frances and Ennis were discouraged; they felt they could only offer tutoring support now that most DE courses were off the books.

Discussion

We sought to get "under the hood" of practitioner thinking about DE in the context of California Assembly Bill 705 at three colleges in one district. Increasingly, state policymakers are mandating changes in response to student outcomes data and research evidence, and in so doing, are shifting how colleges should prepare students for transfer-level courses. In the case of AB705, the policy set new rules for how students should be placed and supported to timely completion of initial transfer English and math courses, and what role, if any, DE courses can and should play. Research to date has found that community colleges across California (Cuellar Mejia et al., 2020; Hern et al., 2020) and in the district where our study took place (Author et al., 2021; Authors, 2022) are complying with AB705's explicit demands and seeing improvements in student access to and completion of transfer English and math courses.

Yet, consistent with implementation scholarship on state DE reforms (e.g., Nix et al., 2022), as well as on AB705 (Trinidad, 2022), we found that practitioners tasked with enacting AB705 were mixed in their views about the policy. That said, whether they were fully on-board or critical of AB705, all expressed at least one reason why pre-requisite remediation should stay. This suggests that even as the policy is doing what it was designed to do in terms of improving student outcomes, it may be less successful in getting practitioners to re-evaluate the efficacy, efficiency, and fairness of DE courses, and to imagine different ways of preparing students for college work. This is an important lesson for policymakers and reformers who are attempting to deinstitutionalize this staple offering, one that has long been a piece of community colleges'

multi-faceted mission (Bragg, 2001). Our findings support the idea that it may not be enough to disallow the use of test-based placement and to shrink the ground upon which DE courses can be offered. By not directly addressing practitioner thinking and beliefs, reforms like AB705 could eliminate problematic structures but leave in place the logics and associated practices that gave rise to the problem that reformers seek to address. This is consequential during the early days of a reform when practitioners are setting the curricular, pedagogical, and support foundations upon which the new regime of college preparation is set. Embedded into this new regime could be old logics and practices that may reconstitute inequities over time, which would most likely manifest along racial and socioeconomic lines (Oakes et al., 2005; Ray, 2019).

Our findings are a window into the micro-level realities of policy implementation: how instructors, counselors, staff, and mid-level administrators respond to external demands that have consequences for their daily work, and how they navigate new rules that may or may not align with what they believe students need and what they are supposed to do as practitioners in an open-access institution. Our findings suggest that it is important to not reduce practitioners to actors who exist primarily to implement reforms with fidelity, nor to judge their questions and criticisms of a policy as mere "resistance." As recent work on community college faculty has demonstrated, they are serious professionals who are invested in making their institutions work for students and indeed, for themselves (Aguilar-Smith & Gonzales, 2021; Gonzales & Ayers, 2018). The latter makes sense given that instructors and counselors such as those we interviewed are more than likely "lifers" at their institutions, and what they are juggling—conceptually and practically—can shape their willingness to adopt changes advocated by those working outside their milieu. Faced with an ongoing stream of reforms of which DE reform is only one, it is thus unsurprising that practitioners hold onto what they know about DE and draw on experiences that confirm rather than critically challenge how they prepare students for college work and what

community colleges are meant to be. Our participants espoused the three logics in support of DE: basic educational competency, educational opportunity, and control/choice. These logics often functioned interdependently in their minds, although they sometimes competed, as in the case of the choice logic.

As Grubb and Gabriner (2012) detailed a decade ago in *Basic Skills Education in Community Colleges*, the logic of basic educational competency is not new. Instructors charging high schools with not getting students college-ready and underscoring the value of skills-based and sequential learning repeated in the pages of their book and our interviews. Why does this logic persist? In part, the continued pull of this logic could be tied to the community colleges' longtime role as higher education's "second chance" institution where those who were not well served by their high schools or who did not pursue postsecondary work until later in life can start again (Grubb & Gabriner, 2012; Medsker, 1960). DE courses are an enactment of community college' second chance function. In these courses, instructors are responsible for ensuring that students with differing levels of knowledge and skills can tackle future courses (Grubb & Gabriner, 2012). This is no easy task, and in the face of this challenge, instructors may feel it most important to first and foremost address what students do not know and/or cannot do, to help them develop basic educational competency so they can have their second chance.

Our data do not allow us to comment on what, exactly, happens in the classrooms and whether instructors' practice strays beyond the logic of basic educational competence. That said, in their study of DE classrooms in community colleges, Grubb and Gabriner (2012) found that various forms of "remedial pedagogy" aimed at building students' basic educational competency prevailed well into the 2000s as "the default position" (p. 72), despite reform efforts in the 1980s and 1990s that sought to disrupt remedial pedagogy (Jaggars & Bickerstaff, 2018). While one instructor suggested that AB705 was an opportunity to re-evaluate teaching, AB705 did not

mandate instructional reform, which leaves change inside the classroom to instructors. Even as DE courses have gone away under AB705, the staying power of the basic educational competency logic could mean that remedial instructional practices could persist at the transfer-level. We cannot ignore the fact that at the colleges in our study and in many community colleges around the country, students of color should benefit from DE reforms like AB705 given their disproportionate placement in DE courses. We also cannot ignore that while students of color could need content mastery and skill building, this alone is not the key to their persistence and success. Recent scholarship has shown that the success of Black and Latina/x/o students is bolstered by instructors who validate them; who see their social identities, personal experiences, and cultural backgrounds as assets for their learning; and who do not only see them through a lens of disadvantage and marginalization (Acevedo-Gil et al., 2015; Baber, 2018; Doran & Singh, 2018). Instructors who purport to care about students of color and racial equity, therefore, must let go of basic educational competency as the guiding logic of instruction.

Our findings also illustrated how practitioners' views about DE is tied to the logic of educational opportunity. This led to a critique of AB705 as limiting opportunity and preventing community colleges from fulfilling its open-access mission. In contrast to proponents who argued that AB705 advances equity and opportunity, many of our participants worried that the policy would be deleterious for minoritized students. Similar to previous research (Nix et al., 2020), some participants shared that DE, not DE reform, advanced educational opportunity. They argued that AB705 closed doors for Black and Brown students interested in STEM, students with disabilities, and English Language Learners in particular. To them, DE was the "preventative medicine" that mitigated risk of student failure and boosted the chances of success at the transfer level. The notion of DE as "preventative medicine" resonates with what Posselt (2015) found in her study of disciplinary logics guiding graduate admissions decisions. She found many faculty

on admissions committees were reluctant to admit students with low GRE scores, believing students would be ill-prepared for the quantitative classes; admitting them would only set them up for failure. While our study took place in community colleges and Posselt's in the context of selective graduate admissions, both showed how practitioners trusted data suggesting students are not ready, rather than evidence of students' potential. In both cases, practitioners were paternal in their determination that letting students into transfer-level English and math in our study and into graduate school in Posselt's is risky. Hence, it is better that students first brush up on their skills then try again. Whether AB705 or DE upholds educational opportunity may, in time, be resolved with longitudinal data that tracks student progression to transfer-level and beyond. Such data should help answer which students needed preparation through DE courses or whether they were capable of passing transfer English and math within a year, as well as succeeding in subsequent courses. Until then, the fact that DE reform advocates and DE proponents each claim to uphold educational opportunity suggests that both sides must engage in productive discussions and come to a working consensus of what educational opportunity, equity, and student success mean. Such discussions are perhaps especially important in community colleges, where opportunity and democracy are foundational to their institutional identity and animate the reasons why practitioners are drawn to them (Gonzales & Ayers, 2018).

Finally, we found that choice was a core logic for keeping DE, however practitioners expressed differing opinions about who knows best and who should be driving choice-making. Through AB705, policymakers decided the fate of DE in California. While further "from the ground," they are more likely engaging with knowledge and reform communities across institutions and states, and thus may have a broader view of what is and is working in different contexts. Our findings raise the question of whether DE should be the faculty's purview since they are responsible for what happens in the classroom and have on-the-ground insights of issues

impacting students. Our findings also suggest that choice should be in students' hands. The alleged beneficiaries of DE legislation, their lives arguably hang most in the balance. Indeed, student activists have long been involved in advocating for students' needs in California's community colleges, especially as it relates to English and math placement (SMAC, n.d.).

Although our participants argued that students should have the choice for DE, their avowal to protect student's right to choose was slightly contradictory. They supported students who wanted to take DE, claiming this choice should not be taken away from them. Yet, if under AB705, students self-selected into transfer-level courses, participants viewed some as unprepared and unqualified to make those decisions. This suggests that some participants honored student choice when the decision was to take DE. This equivocation again alludes to findings from Posselt's (2015) work on disciplinary logics: while participants described themselves as "bleeding heart idealists" who "all vote Democrat," support student success, and believe there should be fewer barriers to degree completion, this cannot happen at the expense of traditional metrics of college readiness.

It is important to underscore how organizational contexts affect logics (Binder, 2007; Woulfin et al., 2022) and subsequently how practitioners they make sense of policy (Schudde et al., 2020; Spillane et al., 2002). In our study, the logics practitioners used to defend DE show that logics do not operate in a "top-down" manner and that "real people, in real contexts, with consequential past experiences of their own, play with them, question them, combine them with institutional logics from other domains, take what they can use from them, and make them fit their needs" (Binder, 2007, p. 568). Faculty and staff became dispossessed institutional actors in a "hegemonic work environment" (Leonard, 2021, p. 1090); they were absent from decision making yet bore increased expectations and constantly changing demands as they worked to implement AB705.

Implications

The persistence of DE logics in an era of DE reform has implications for policy, practice, and research. Our findings illustrate how practitioners' commitment to DE reform efforts are contingent upon the logics that shape how they make sense of the purpose of community colleges and the types of students who attend them. This leads us to conclude that policymakers and reformers should design DE reform efforts that not only focus rule and structure change if the goal is for community colleges to transform how they prepare students for college work; attention must be paid to practitioner beliefs, to their thoughts and concerns about the changes proposed, and to circumstances, conditions, and contexts in which they are expected to implement reforms. The practitioners with whom we spoke largely felt disenfranchised from both the policy developed by state legislators and the system office and implementation decisions made by the district office, which aligns with the policy implementation literature around street-level bureaucrats (Grote et al., 2020; Weatherly and Lipsky, 1977). Notably, despite being the ones most in tune with what is happening inside the classroom, instructors believed their opinions and concerns around DE and AB705 were not considered. For policy to be implemented with fidelity, policymakers should heed practitioners' concerns throughout the policy process, otherwise they run the risk of the policy only being implemented symbolically and with surface-level changes toward compliance, which leaves potentially detrimental underlying logics still intact. These concerns were heightened among participants in our study because of district administrators' across-the-board decision to not offer DE courses two or more levels below transfer. This decision aggrieved faculty, even though who embraced AB705.

When using a top-down mandate like AB705, policymakers and reformers at all levels should consider pairing this "authority tool" with "capacity tools" such as professional development and learning opportunities (PD) that can help disrupt patterns of thinking that are

at-odds with policy goals (Schenider & Ingram, 1990). In our study, these patterns of thinking were encapsulated in three logics that have kept DE alive at our focal colleges, some of which were rooted in race- and class-based deficit stereotypes of student ability. To start, practitioners need structured PD to critically reflect on and evaluate these logics and associated practices in light of policy goals (Bensimon, 2007); otherwise, they may persist even in the absence of DE courses. Practitioners also need PD that advances their learning of what works and does not work for minoritized students. Acevedo-Gil et al.'s (2015) framework for a "critical race validating pedagogy," Baber's (2018) analysis of the One Million Degrees program in the City Colleges of Chicago, and Doran and Singh's (2018) findings about the Dream Catchers program in Texas all offer useful insights for design, as do the Puente and Umoja programs in the California Community Colleges. A third PD focus should be around the question of how community colleges generally and their community college more specifically should advance opportunity and democracy in an era where DE is shrinking. Lastly, PD should feature alternatives to DE courses such as co-requisite remediation (Logue et al., 2019) and pre-matriculation basic skills support programs (Weiss, et al., 2021) that have been shown to have a positive impact on immediate and longer-term completion outcomes. Ideally, examples will be drawn from institutions that have a similar demographic composition and DE needs so that practitioners are less likely to dismiss research findings as not applicable to their students. While policymakers and leaders generally cannot mandate PD for faculty or staff, they can incentivize participation by messaging its importance, by providing stipends and course release time, and by establishing a "culture of appreciation for instruction," which Grubb and Gabriner (2012) observed is lacking in most community colleges. Leaders should work with department chairs and the campus academic senate on implementing such PD.

Lastly, our paper has implications for future research. Our study examined practitioner logics for DE during the early days of implementation at three colleges in one district. Research is needed to see whether the same logics prevailed among practitioners at other community colleges who are similarly responsible for DE reform implication, or whether other logics animated their thinking about pre-requisite remediation. Future work should also explore whether and in what ways practitioners shift their logics over time, as well as what contributes to these shifts. Finally, researchers can also take up the question of practitioner labor, emotional labor especially, that they endure when implementing DE reform (Antoniadou & Quinlan, 2022). While not a main finding, we saw evidence of our participants' emotional labor. Such emotional labor is noteworthy, especially when reform pressures are ever-present. Gonzales and Ayers (2018) have argued that in the face of systemic underfunding and scarce resources, community college faculty are expected not only to be educators but also emotional laborers; expected to exemplify "an ethic of care and vocation" (p. 471); expected to mitigate the structural inequities their students face; and "expected to be more available, to stretch further, to give more, all in the name of fostering success" (p. 471). The practitioners in our study faced these expectations under AB705. Research is needed to explore the emotional labor of DE reform implementation so that policymakers can better understand practitioner realities.

Endnotes

[1] As described in Title 5 of the California Code of Regulations (Section 53200), the 10+1 includes: (1) Curriculum including establishing prerequisites and places courses within disciplines; (2) Degree and certificate requirements; (3) Grading policies; (4) Education program development; (5) Standards or policies regarding student preparation and success; (6) District and college governance structures, as related to faculty roles; (7) Faculty roles and involvement in accreditation processes, including self-study and annual reports; (8) Policies for faculty

professional development activities; (9) Processes for program review; (10) Processes for

institutional planning and budget development; and (11) Other academic and professional

matters as mutually agreed upon between the governing board and the academic senate.

Table 1

Participants (n=24)

Name	Role	R/E	Gender	Tenure (as of Spring 2021)
College 1				
Tanya	Dean	White	Female	6
Ennis	Instructor	White	Male	6
Adrian	Instructor	Latinx	Male	14
Frank	Dean	Asian	Male	14
Mo	Staff	White	Male	7
George	Counselor	Latinx	Male	2
John	Instructor	Asian	Male	15
Frances	Instructor	Asian	Male	14
Shin	Instructor	White	Male	16
Lauren	Instructor	Black	Female	20
College 2				
Giovanni	Counselor	Latinx	Male	14
Aaron	Instructor	Multi-racial	Male	23
Nadav	Instructor	White	Male	24
Gigi	Counselor	Latinx	Female	6
Jonathan	Instructor	Latinx	Male	24
Nicole	Dean	Latinx	Female	24
Rory	Instructor	Latinx	Female	11
Evelyn	Counselor	Asian	Female	6
Nash	Dean	White	Male	2
College 3				
Andie	Instructor	White	Female	20
Victor	Instructor	Multi-racial	Male	
Steven	Instructor	White	Male	9
Rebecca	Staff	White	Female	8
Sally	Dean	Asian	Female	9

Table 2

Perspectives on AB705 (Spring 2021)

	An "Opportunity"	More Positive than Negative	Neither Here nor there	More Negative than Positive	"Making things worse"
College 1 (n=10)	+ ■ x ●	+	●	●	●●●
College 2 (n=9)	■ x x x	+ ●		●	●●
College 3 (n=5)	+	●●●	■		

+ Staff   ■ Dean   x Counselor   ● Instructor

Table 3

DE Rationales - Count

	Staff (n=3)	Dean (n=4)	Counselor (n=4)	Instructor (n=13)	Total
Discerned from Scholarship					
● Educational Standards	1			10	11
● Compensatory Education		1	2	7	10
● Educational Opportunity	1	1		5	7
● Student Choice	1	1	4	9	15
● Civic & Workforce Development		1		2	3
Discerned Inductively					
● Faculty Purview	1			8	9
● Open-Access Mission				8	8
● Sequential Learning	1			11	12
● Preventative Medicine Against Educational Malpractice			1	11	12

References

Authors, 2016.

Authors, 2022.

Author et al., 2020

Author et al., 2021.

Aguilar-Smith, S., & Gonzalez, L. D. (2021). A study of community college faculty work

 expectations: Generous educators and their managed generosity. *Community College Journal*

 of Research and Practice, *45*(3), 184-204. https://doi.org/10.1080/10668926.2019.1666062

Antoniadou, M., & Quinlan, K. M. (2022). Holding true or caving in? Academics' values,

 emotions, and behaviors in response to higher education reforms. *Higher Education Policy,*

 35(2), 522–541. https://doi.org/10.1057/s41307-021-00225-1

Arendale, D. R. (2005). Terms of endearment: Words that define and guide developmental

 education. *Journal of College Reading and Learning, 35*(2), 66-82.

 https://doi.org/10.1080/10790195.2005.10850174

Arendale, D. R. (2011). Then and now: The early years of developmental education. *Research*

 and Teaching in Developmental Education, *27*(2), 58-76.

Baber, L. D. (2018). "Living in the along": Validating experiences among community college

 students in a college transition program. *Community College Review*, *46*(3), 315-340.

 https://doi.org/10.1177/0091552118775813

Bailey, T., Jeong, D. W., & Cho, S-W. (2010). Referral, enrollment, and completion in

 developmental education sequences in community colleges. *Economics of Education Review*,

 29, 255-270. https://doi.org/10.1016/j.econedurev.2009.09.002

Barnett, E., Bergman, P, Kopko, E., Reddy, V., Belfield, C., Roy, S., & Cullinan, D. (2018).

 Multiple measures placement using data analytics: An implementation and early impacts

report. Center for the Analysis of Postsecondary Education.

https://ccrc.tc.columbia.edu/publications/multiple-measures-placement-using-data-analytics.html

Bensimon, E. M. (2007). The underestimated significance of practitioner knowledge in the scholarship on student success. *The Review of Higher Education, 30*(4), 441-469. https://doi.org/10.1353/rhe.2007.0032

Bettinger, E. P., Boatman, A., & Long, B. T. (2013). Student supports: Developmental education and other academic programs. *The Future of Children, 23*(1), 93-115.

Binder, A. (2007). For love and money: Organizations' creative responses to multiple environmental logics. *Theory and Society*, *36*(6), 547–571. https://doi.org/10.1007/s11186-007-9045-x

Boatman, A. (2021). Accelerating college remediation: Examining the effects of math course redesign on student academic success. *The Journal of Higher Education*, *92*(6), 927-960. https://doi.org/10.1080/00221546.2021.1888675

Boylan, H. R. (1988). The historical roots of developmental education: Part III. *Research in Developmental Education, 5*(3), 1-3.

Boylan, H. R., & White, W. G. (1987). Educating all the nation's people: The historical roots of developmental education: Part I. *Research in Developmental Education, 4*(4), 1-4.

Bragg, D. D. (2001). Community college access, mission, and outcomes: Considering intriguing intersections and challenges. *Peabody Journal of Education*, *76*(1), 93-116. https://doi.org/10.1207/S15327930PJE7601_06

Brewer, D. J., & Smith, J. (2008). A framework for understanding educational governance: The case of California. *Education Finance and Policy, 3*(1), 20-40.

Bruno, J. (2017, June 27). *Subject: AB 705 (Irwin), as of 05/30/17 Position: Oppose unless amended*. Academic Senate for California Community Colleges. https://www.asccc.org/content/ab-705-oppose

California Acceleration Project (CAP). (2019, February). *The CAPacity Gazette*. https://accelerationproject.org/Portals/0/Documents/Cap_Gazette_2019_v5_Web.pdf

California Acceleration Project (CAP). (2022). *Implementing corequisite models*. Retrieved July 12, 2022, from https://accelerationproject.org/Corequisites

California Legislative Information. (2017, October 13). *Assembly Bill 705 Seymour-Campbell Student Success Act of 2012: Matriculation: Assessment*. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB705

Cox, R. D. (2015). "You've got to learn the rules": A classroom-level look at low pass rates in developmental math. *Community College Review*, *43*(4), 264-286. https://doi.org/10.1177/0091552115576566

Cox, R. D., & Dougherty, M. (2019). (Mis)Measuring developmental math success: Classroom participants' perspectives on learning. *Community College Journal of Research and Practice*, *43*(4), 245-261. https://doi.org/10.1080/10668926.2018.1456378

Cuellar Mejia, M., Rodriguez, O. & Johnson, H. (2020). *A new era of student access at California's community colleges*. Public Policy Institute of California. https://www.ppic.org/

Gonzales, L. D., & Ayers, D. F. (2018). The convergence of institutional logics on the community college sector and the normalization of emotional labor: A new theoretical approach for considering the community college faculty labor expectations. *The Review of Higher Education*, *41*(3), 455-478. https://doi.org/10.1353/rhe.2018.0015

Greenwood, R., & Hinings, C. R. (1996). Understanding radical organizational change: Bringing together the old and the new institutionalism. *Academy of Management Review, 21*(4), 1022-1054.

Grote, D. M., Knight, D. B., Lee, W. C., & Watford, B. A. (2020). Exploring Influences of Policy Collisions on Transfer Student Access: Perspectives From Street-Level Bureaucrats. *Educational Evaluation and Policy Analysis, 42*(4), 576–602. https://doi.org/10.3102/0162373720962509

Grubb, N. (with Gabriner, R.). (2013). *Basic skills education in community colleges: Inside and outside of classrooms*. Routledge.

Hern, K., Snell, M., & Henson, L. (2020). *Still getting there: How California's AB 705 is (and is not) transforming remediation and what needs to come next*. Public Advocates.

Jaggars, S. S., & Bickerstaff, S. (2018). Developmental education: The evolution of research and reform. In M. B. Paulsen (Ed.), *Higher education: Handbook of theory and research* (Vol. 33, pp. 469-503). Springer.

Johnson, H., & Mejia, M. C. (2019). *Higher education in California: California's higher education system*. Public Policy Institute of California. https://www.ppic.org/publication/higher-education-in-california-californias-higher-education-system/

Logue, A. W., Douglas, D., & Watanabe-Rose, M. (2019). Corequisite mathematics remediation: Results over time and in different contexts. *Educational Evaluation and Policy Analysis*, *41*(3), 294-315. https://doi.org/10.3102/0162373719848777

Maldonado, C. (2019). "Where your ethnic kids go": How counselors as first responders legitimate proper course placements for community college students. *Community College*

Journal of Research and Practice, 43(4), 280-294.

https://doi.org/10.1080/10668926.2018.1463303

March, J. G., & Olsen, J. (2006). The logic of appropriateness. In M. Moran, M. Rein, & R. E.

Goodin (Ed.), *The Oxford handbook of public policy* (pp. 689-708). Oxford University Press.

https://doi.org/10.1086/226550

McCabe, R. H., & Day, P. R., Jr. (Ed.). (1998). Developmental education: A twenty-first century

social and economic imperative. League for Innovation in the Community College.

https://eric.ed.gov/?id=ED421176

Medsker, L. L. (1960). *The junior college: Progress and prospect*. McGraw-Hill Book

Company.

Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis*. Sage.

Nix, A. N., Jones, T. B., Brower, R. L., & Hu, S. (2020). Equality, efficiency, and developmental

education reform: The impact of SB 1720 on the mission of the Florida College System.

Community College Review, *48*(1), 55-76. https://doi.org/10.1177/0091552119876327

North, D. C. (1990). *Institutions, institutional change, and economic performance*. Cambridge

University Press.

Oakes, J., Welner, K., Yonezawa, S., & Allen, R. L. (2005). Norms and politics of equity-

minded change: Researching the "zone of mediation". In M. Fullan (Ed.), *Fundamental

change: International handbook of educational change* (pp. 282-305). Springer.

https://doi.org/10.1007/1-4020-4454-2_15

Park, T. J., Woods, C. S., Hu, S., Jones, T. B., Cig, O., & Tandberg, D. (2018). Developmental

education reform and the racial/ethnic achievement gap: The case of first-semester gateway

course passing rates when Florida made developmental education optional. *Teachers College

Record*, *120*(12), 1-24.

Park-Gaghan, T. J., Mokher, C., Hu, X., Spencer, H., & Hu, S. (2020). What happened following comprehensive developmental education reform in the Sunshine State? The impact of Florida's developmental education reform on introductory college-level course completion. *Educational Researcher*, *49*(9), 656-666. https://doi.org/10.3102/0013189X20933876

Park-Gaghan, T. J., Mokher, C., Spencer, H., & Hu, S. (2021). Do rising tides lift all boats? Exploring heterogenous effects of Florida's developmental education reform by high school academic preparation. *American Journal of Education*, *127*(3), 471-495. https://doi.org/10.1086/714244

Posselt, J. R. (2015). Disciplinary logics in doctoral admissions: Understanding patterns of faculty evaluation. *The Journal of Higher Education, 86*(6), 807-833. https://doi.org/10.1080/00221546.2015.11777385

Ray, V. (2019). A theory of racialized organizations. *American Sociological Review, 84*(1), 26-53. https://doi.org/10.1177/0003122418822335

Rigby, J. G. (2014). Three logics of instructional leadership. *Educational Administration Quarterly, 50*(4), 610-644. https://doi.org/10.1177/0013161X13509379

Schrynemakers, I., Lane, C., Beckford, I., & Kim, M. (2019). College readiness in post-remedial academia: Faculty observations from three urban community colleges. *Community College Enterprise*, *25*(1), 10-31.

Schneider, A., & Ingram, H. (1990). Behavioral assumptions of policy tools. *The Journal of Politics*, *52*(2), 510-529.

Schudde, L., Jabbar, H., Epstein, E., & Yucel, E. (2021). Students' sense making of higher education policies during the vertical transfer process. *American Educational Research Journal*, *58*(5), 921–953. https://doi.org/10.3102/00028312211003050

Schudde, L., & Keisler, K. (2019). The relationship between accelerated dev-ed coursework and

early college milestones: Examining college momentum in a reformed mathematics pathway.

AERA Open, *5*(1), 1-22. https://doi.org/10.1177/2332858419829435

Scott, W. R. (2007). *Institutions and organizations* (3rd ed.). Sage.

Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition:

Reframing and refocusing implementation research. *Review of Educational Research, 72*(3),

387-431. https://doi.org/10.3102/00346543072003387

Students Making A Change. (n.d.). Who we are. https://www.studentsmakingchange.org/who-

we-are

Taylor, L. D. (2020). Neoliberal consequence: Data-driven decision making and the subversion

of student success efforts. *The Review of Higher Education*, *43*(4), 1069–1097.

https://doi.org/10.1353/rhe.2020.0031

Thorton, P. H., & Ocasio, W. (2008). Institutional logics. In R. Greenwood, R. Oliver, & K.

Sahlin. (Ed.), *Sage handbook or organizational institutionalism* (pp. 99-129). Sage.

Trinidad, A. (2022). *Race-conscious implementation of a developmental education reform in

California Community Colleges*. USC Race and Equity Center.

https://www.racialequityforccc.com/reports

Trinidad, A., & Felix, E. R. (2022). Unpacking the racial possibilities of AB 705 in California:

Can a raceless policy address the racialized problem of developmental education? In S.

Rodriguez, & G. Q. Conchas (Eds.), *Race frames in education: Structuring inequality and

opportunity in a changing society*. Teachers College Press.

Valentine, J. C., Konstantopoulos, S., & Goldrick-Rab, S. (2017). (2017). What happens to

students placed into developmental education? A meta-analysis of regression discontinuity

studies. *Review of Educational Research, 87*(4), 806-833.

Weatherly, R., & Lipsky, M. (1977). Street-level bureaucrats and institutional innovation: Implementing special education reform. *Harvard Educational Review, 47*(2), 171-197.

Weiss, M. J., Scrivener, S., Slaughter, A., & Cohen, B. (2021). An on-ramp to student success: A randomized control trial evaluation of a developmental education reform at the City University of New York. *Educational Evaluation and Policy Analysis*, *43*(4), 555-586. https://doi.org/10.3102/01623737211008901

Witham, K. A., Ching, C. D., & Dowd, A. C. (2021). Managing change towards racial equity in higher education through competing institutional logics. In C. Roelke, & J. K. Rice (Ed.), *American higher education: Contemporary perspectives on policy and practice* (pp. 109-138). Information Age Publishing, Inc.

Woulfin, S. L., Lamb, A., & Cyr, D. (2022, August 11). Animating the logics perspective to understand dilemmas of reform: A review of the pre-K to 12 education and social sector literature. https://doi.org/10.31235/osf.io/cytmd

Woulfin, S. L., & Weiner, J. (2019). Triggering change: An investigation of the logics of turnaround leadership. *Education and Urban Society*, *51*(2), 222-246. https://doi.org/10.1177/0013124517714865

Xu, D. (2016). Assistance or obstacle? The impact of different levels of English developmental education on underprepared students in community colleges. *Educational Researcher*, *45*(9), 496-507. https://doi.org/10.3102/0013189X16683401