

Purpose of Sabbatical

The original purpose of my sabbatical was to engage both administrators and faculty on their perceptions of the implementation of AB705 and corequisite structure and teaching. My purpose shifted slightly by only focusing on faculty. This study investigated faculty perceptions of the organizational and pedagogical changes occurring in their colleges during the implementation and evaluation of the new California state mandate, AB 705. This study also considered faculty teaching strategies for the newly required corequisites, or courses attached to and taken simultaneously with an established transfer level course. AB 705 (Irvin, 2017) mandated that college students be placed directly into transfer level English and math courses, and that colleges create corequisite courses to support students at this higher level. By allowing for additional time for prerequisite material to be reviewed and practiced, corequisites are designed to support students who would otherwise be taking remedial, non-college credit bearing courses. To engage in this inquiry, this study first explored the perceptions of faculty towards mandated policy, ensuing reform, and the impact of such reform to their respective roles. Second, the study investigated the approaches that faculty teaching corequisite courses report that they undertake to differentiate pedagogy. Lastly, this study gathered and analyzed faculty descriptions of how they evaluate the implementation of AB 705, including recommendations for ongoing evaluation.

Methods

This study used basic qualitative methods to closely investigate the impact of this mandate's rollout among math faculty at community colleges in California. Participants were recruited based on whether they had taught a corequisite course during the fall 2019 semester. This sample included both full-time and adjunct faculty, those with and without tenure, and those with teaching experience ranging between 2 and 25 years. I also conducted a document analysis of meeting notes, emails, and surveys. I conducted a survey that included responses from 80+ math faculty members. This survey was more qualitative in nature and the responses contributed to some of themes within the findings. I was able to triangulate the document content, the interview transcriptions, and the survey data to address the inquiry. Using multiple sources of data in some cases provided me with a more nuanced perspective on the rollout of AB 705 than the responses from the interviews alone.

Summary of Findings

This process unfolded four major categories of professors at the colleges.

1. The Vested With Skin in The Game – Those expressing strong support of the reform and political involvement in the process of it becoming a law and previous interventions.
2. The Emotionally Supportive – Those supporting the reform primarily based on their personal feelings and emotions.
3. The Curious and Suspicious – Those neutral about their support of AB705 choosing to observe what happens as it unfolded.

4. The Naysayers - Those who were not in support of AB 705 at all and wanted it to stop immediately.

Analysis of interviews, survey responses, and document analysis indicate several major findings. The majority of faculty interviewed were well-aware of the policy decision that led to the reform becoming a law, but most of the faculty were neutral or against the reform feeling that it was top down instituted (NMHED, 2017). Group work and affective domain activities emerged as the agreed upon pedagogy most appropriate for the corequisites. More professional development and faculty and counseling collaboration towards placement were the major recommendations towards improvement and evaluation of the implementation. One surprising finding was that those in support of the reform admitted that they did not change their pedagogy, while those against or neutral toward the reform did change their pedagogy.

Background and Review of Literature

The majority of the faculty interviewed and surveyed did not support the reform. The primary reasons for resistance was that they felt the mandate was top down instituted and would lead to several unprepared students in their courses. This sentiment lends support to the findings of Cafarella (2016) study of faculty perspectives on math reform using acceleration. He found that when reform is led by faculty, implementation of reform is much smoother. Similarly, other studies have recommended avoiding a top down approach when instituting reform, and warned of the importance of faculty buy-in (NMHED, 2017; Rodriguez et al., 2018). The RP Group (2014) also expressed that without faculty buy-in, sustainability of the reform is questionable.

Several colleges throughout California, piloted interventions prior to AB 705, including acceleration and multiple measures, two predecessors of AB 705 (CAP, 2018). Document review indicated that math faculty were consistently provided information, primarily through email, regarding the success of these pilots at increasing the completion rates. Only interested faculty participated, taught, and redesigned the curriculum for these early interventions (NMHED, 2017; Sides, 2016). Faculty not interested did not participate in this reform but were made aware of it. Such reform and pedagogical preferences contributed to the rifts among faculty in math departments (RP Group, 2014), and this rift further affected faculty buy-in for similar reform including AB 705.

Backed by data from the interventions, faculty groups including California Acceleration Project, CAP, advocated for AB 705 to become law (Rodriguez et al., 2018). The Chancellor's office recognized these interventions' impact on improving completion rates and endorsed AB 705, stating that direct placement into transfer level would have an even larger impact on completion rates (Hope et al., 2019). With these recommendations and the research from other states with similar legislations (Daugherty et al., 2018), lawmakers in California enacted AB 705. In making their decision, they also factored the heavy costs associated with remediation and placement tests without any improvements in completion rates (Bettinger et al., 2013).

Once AB 705 was officially a law, school administrators had no choice but to implement. Per document review, administrators did work with faculty on the creation of the corequisite and new placement rules. This included an inflexible timeline to implementation in order to meet compliance by fall of 2019. This urgency may have caused some faculty to feel

that the mandate was top down imposed, even locally on their campus, supporting Mangan's findings (2014).

While the faculty who participated in the reform prior to AB 705 did so by choice, AB 705 imposes rules with placement and corequisites that no longer leaves the choice to faculty. All faculty teaching any transfer level math course would now have students that were placed directly into their transfer level courses without any prerequisites or placement exam (Irvin, 2017). Such placement worried faculty and caused many to be concerned about the students' preparedness level (CCCSE, 2016). Literature had been shared with faculty that showed that high school GPAs and direct placement with support through corequisite are better predictors of success than a placement exam and prerequisites (Jackson et al., 2014; Logue et al., 2014). However, some faculty continued to push for some remnants of the old system of remediation and placement tests (Cafarella, 2016). Yet recent data confirms that even for students with the lowest high school GPAs, direct placement into transfer level courses increases their throughput rate from 4% to 42%. CAP (2020) further holds that there has been no data to support that any student would be better off starting in remediation.

Given this history of the implementation of AB 705, I will further discuss the varied implications of this research on this field. The recommendations from my research and findings fall into the following categories: faculty buy-in, pedagogy, professional development, support for adjunct faculty, and faculty-counselor collaboration towards placement.

Implication and Recommendation on Faculty Buy-In

In this study, a third of the faculty were on the fence regarding their buy-in for this reform admitting that they wanted to wait and see how the implementation worked out. The

opportunity to build more faculty buy-in and therefore create more sustainability for AB 705 (Cafarella, 2016), lies within this set of faculty. As this reform was driven by outcomes from early adopters as well as from other states with similar initiatives (Daugherty et al., 2018), inclusion of such supportive data should be in the actual legislation. Additionally, before creating such policy, legislators should be transparent, open to considering all faculty perspectives on the reform, and ensure that the law is written to address these concerns. Lawmakers should also include guidance on an overall structure on how to implement that still allows for flexibility and customization among the colleges (NMHED, 2016). The Chancellor's Office can share out a variety of best practices from early adopters allowing colleges and faculty to have resources even towards initial implementation. There should also be acknowledgement by college administrators that new reform such as AB 705 is a work in progress. Administrators in collaboration with faculty should continuously assess the implementation including review student outcomes. While there may not ever be unanimous buy-in, if improvements in completion rates resemble those from early adopters (CAP, 2020), the faculty on the fence could eventually become supportive of AB 705. Merging them with those already in support would represent the majority of the faculty.

Implications for Pedagogy: How Could Reform Have Been Supported?

The literature examining the successes or failures of reforms, warned that pedagogical changes are essential to complement reform that includes changes in placement and structure (Hodara et al., 2012). A document review of course outlines for corequisites show that faculty had their preference as to how and when to teach prerequisite skills based on the needs of the students. While there was overall agreement on affective domain activities and group work as useful pedagogies, these approaches were new for several participants. This diversity in

faculty experience and perception indicates a need for support through more training and new course structures.

Implications for Pedagogy Changes

Affective Domain Skills Course. The findings of this study support several implications, and associated recommendations, for pedagogy changes that emerged. Since AB 705 enforces all faculty to be involved in the reform, it may be useful for institutions to consider offering a separate course for students to gain these affective domain skills, especially given that some math faculty are not actively teaching these skills in their math courses. To ensure that students have access to and enroll in such a course, colleges can mandate it as a graduation requirement and publicize the change widely. To further ensure that the students have these skills, that math faculty have identified as essential, this course should be taken prior to or while the student is enrolled in the transfer level math course. Math faculty can collaborate on the curriculum building for this course so that study skills specific to success in math courses are included and support the students' trajectories in concurrent and ensuing math courses.

Institutional Support for Group Work. Since the majority of the faculty agree that group work is a necessary pedagogy to produce better student success under AB 705, institutions should include this strategy within the course outline for the curriculum for the corequisites (CAP, 2020). As many faculty had yet to use such pedagogy, the Chancellor's Office should provide resources on best practices and examples. Mandated professional development on the nuts and bolts of using group work in math courses and through culturally responsive teaching has been established as useful to both instructors and students, and should

also be provided directly (Rubel, 2017). Institutional support will clarify the positive impact of utilizing grouping in math instruction as well as decreasing equity gaps. While some faculty do use group work during their math courses, by adding this pedagogy in the course outline, all students will receive the benefit of these skills.

Professional Development. Supporting my finding about the importance of professional development in this process, the literature points to extensive and mandatory training for faculty who implemented the early interventions that lead to AB 705 (CAP, 2018; Carnegie, 2010; Statway, 2016). Professional development and faculty training were heavily recommended and sought after by the faculty in my study, much like faculty in other studies (CAP, 2020; Daughety et al., 2016; Rodriguez et al., 2017). When instituting such drastic reform and policy, extensive funding should be allocated to support Professional Development. This will allow faculty to learn how to expand their teaching methods to accommodate the various learning styles and needs of students now enrolling in the transfer level classes due to AB 705 placement. This funding would need to be a byproduct of the legislation and come from state and federal sources.

When the pilots of predecessors to AB 705 were implemented, college administrators complained that the mandatory training for them was too expensive for the pilots to go mainstream (NMHED, 2017). In order for AB 705 to have the greatest impact on students, professional development should be funded and mandated for all faculty teaching the corequisites (Sides, 2016).

Support for Adjunct Faculty. Prior to AB 705, remedial courses made up 60% or more of the math course offerings (CAP, 2020; RP Group, 2014). Moreover, adjunct faculty taught the majority of the remedial courses as full-time faculty were more interested in teaching

the transfer level and STEM level courses. In other studies from the literature toward reform similar to AB 705, there was no differentiation between adjunct and full-time faculty perspectives. Further research regarding AB 705 should more clearly extract the adjunct faculty perspective and its specific struggles. Given their schedules from teaching at multiple colleges, adjunct faculty could not attend meetings where AB 705 planning was discussed and may not have had the time to review the plethora of emails they received from all of the schools where they teach. Colleges should offer incentives to engage adjunct faculty more when it comes to major reform especially since they represent a significant percentage of the faculty. Sides (2016) explained that compensating faculty builds buy-in and participation, and this study adds another dimension to how these two groups of faculty, full-time and adjunct, may experience the implementation differently.

Counselor/Faculty Communication. AB 705 requires community colleges in California to use high school GPAs to place students into transfer level English and math courses (Irvin, 2017). However, counselors, not faculty, are charged with advising for placement. Recent literature suggests that students and faculty would benefit from more faculty involvement and more collaboration between faculty and counselors when it comes to placing students under AB 705 guidelines (CAP, 2020). Given the faculty members' understanding of the skills and commitment for a math course, math faculty can collaborate on guided placements to provide to counselors, including a set of questions or information to pass on to students. Faculty may even be more directly involved by participating in the initial placement by interviewing students and providing more information to students.

Overall Contributions of This Study

This research is significant to fulfilling the completion agenda, which includes increasing the number of certificates, degrees, and transfers at California community colleges. As this research identifies processes in structuring the programmatic features of designing a corequisite that increases student success, results and findings can help community colleges implement such a requirement. With this knowledge, community colleges can build resources and programs that are specific to supporting faculty and meeting the students' needs in a post AB 705 era in the California community colleges.

Personal Reflection

Similar to many faculty interviewed for this study, I, too, felt very uncomfortable and suspicious of this reform when it was first announced. I worried that students would not be prepared based on my years in the classroom and working with students who appeared to not have all the skills necessary to advance in the mathematics sequence. As dean at the time of implementation of AB 705, I had no other choice but to push the reform forward. Around this same time, I was also a doctoral student in UCLA's Educational Leadership Program where I was immersed in educational research. In my coursework, I became attuned to the value of qualitative studies at providing a deeper understanding on the what and the why of human behavior and phenomenon. This awareness drove my support of AB 705 as this reform was backed by both quantitative and qualitative analysis. The most recent studies done on the implementation of AB 705 continue to show its impact on significantly increasing completion rates at California community colleges.

From their responses regarding the reform, I discovered that math faculty need time to process the implications to their role given the traditional confines that have defined mathematics education. Even when presented with a plethora of evidence on pilots and early adopters, faculty desire to see the direct impact at their institution among their students. As implementation continues, it is my hope that administrators engage faculty and their perspectives. May this study be an impetus for showing how collaboration and both quantitative and qualitative data can unite an institution in implementing drastic math reform that will assist thousands of students in achieving their dreams of higher education.