CULTIVATING LEADERSHIP: THE ROLE OF AGRICULTURAL DEANS IN CALIFORNIA COMMUNITY COLLEGES

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Abstract

Agricultural deans at California Community Colleges (CCC) experience a diverse set of responsibilities and challenges. This study investigated the knowledge, skills, and abilities these deans believed were necessary to be effective in their roles as well as what deans believed constituted an effective CCC agricultural program. Results indicated that deans most valued an understanding of district and state policies, effective interpersonal skills, and programs grounded in their local agriculture industry, among other variables. Participants for the qualitative phase included five purposively sampled deans. Participants for the quantitative phase included the population of deans who offer an agricultural associate degree for transfer, with 21 out of 29 deans participating. Findings from this study address a gap in agricultural education literature and can be used for recruitment, professional development, and evaluation purposes regarding CCC agricultural deans and programs.

Keywords: deans, community colleges, agricultural programs, California

Community colleges serve a critical role in the United States' higher education landscape, enrolling around 10 million students each year and constituting over 40 percent of all undergraduate enrollments (Community College Research Center, 2021). Yet, community colleges are largely overlooked in agricultural education research, with most studies focused on school-based agricultural education (SBAE) or university agricultural education. This study addressed the gap in literature by investigating instructional deans who oversee agricultural programs at California Community Colleges (CCC). CCC represent the largest system of higher education institutions in the United States, including 2 million students enrolled at 116 colleges (California Community Colleges Chancellor's Office, n.d.). CCC instructional deans manage academic departments and are seen as middle management in CCC (Russ, 2006; Sill, 2014). Many CCC deans have expressed challenges in their roles, including managing a heavy workload and the need for more formal training (Nguyen, 2014; Sill, 2014).

The focus of this study was on CCC instructional deans who manage agricultural academic departments and programs. The research questions for this study included:

1. What knowledge, skills, and abilities do California Community College agricultural deans believe are required to be effective in their position?
2. How do California Community College agricultural deans describe a successful and effective California Community College agricultural program?

This study has value for both scholars and practitioners. For scholars, this study addresses the gap in agricultural education literature, adding a more comprehensive overview of post-secondary agricultural education. For practitioners, insights from this study can be leveraged to support deans' professional development and increase their effectiveness in their roles.

Literature Review

This study addressed the gap in agricultural education literature regarding community college agricultural programs. The handful of studies that do exist included transfer students' perceptions of career decision making (Whorley et al., 2024), the transfer experience of students who transferred to a college of agriculture at a university (Jones et al., 2020), research on why students enrolled in a summer school community college agricultural course (Keith et al., 2010), and the learning modalities of agricultural students at a two-year college (Ricketts et al., 2005). However, these studies did not involve CCC, nor did they address leadership and administration of agricultural programs at community colleges.

There are a variety of published dissertations that evaluate CCC instructional deans in general, with no exclusive literature focused on CCC agricultural deans. Regarding dean effectiveness, past studies demonstrated the value of mentorship to deans (McManus, 2013) and the need for deans to leverage interpersonal skills to bring about change (Noble, 2006; Yamamura, 2020). Previous experience as an academic senate president was also seen as valuable (Sterling, 2019). CCC instructional deans expressed facing many challenges, including personnel management, campus politics, and balancing their workload (Nguyen, 2014; Russ, 2006). Many CCC experience high turnover in their deans. One study found that, for deans who exercised retreat rights and returned to faculty positions, the reasons for leaving the deanship included excessive workload, lack of autonomy, and a desire to have more direct student contact (Messina, 2008). Deans from underrepresented groups also experienced additional challenges related to their identities (Blackwood, 2010; Fong-Batkin, 2011; Kobayashi, 2009; Reynolds, 2020). Overall, deans expressed a need for more formal training to be effective in their roles (Nguyen, 2014; Sill, 2014).

Methodology

This study followed a two-phase sequential exploratory mixed methods design. The methodological approach was modeled after a similar study on CCC instructional deans completed by Sill (2014). An exploratory design starts with qualitative methods in the first phase of the study to inform future quantitative phases (Creswell, 2009). Phase one of the study included interviews with deans who oversaw agricultural programs. Phase two included a survey distributed to the population of CCC agricultural deans. The CCC agricultural associate degrees for transfer (AD-T) program was used to determine what constitutes a CCC agricultural program. The AD-T guarantees degree completers admission into a partnering California university (California Community Colleges, n.d.). Course requirements for AD-T degrees are established at the state level, providing uniformity and comparability across CCC for this study. Three AD-T degrees are based in agriculture and include agriculture animal sciences, agriculture business, and agriculture plant sciences (C-ID, n.d.).

Semi-structured interviews were used for data collection in phase one. Ary et al. (2009) and Patton (2002) provided the steps for this phase, including question development, interviewing procedures, and transcript analysis. Sill's (2014) interview questions were leveraged to develop interview questions. A variety of question types were formulated in accordance with Patton's (2002) six types of questions. Credibility and dependability were accounted for using a peer review process and audit trial, respectively (Ary et al., 2009). A purposive sampling method was used to select participants. Five deans, out of a population of 29, were interviewed for this study. Fraenkel et al. (2012) note that participants selected via purposive sampling are chosen for specific attributes they can provide the study. Attributes these five deans provided included stewarding a variety of agricultural academic programs, managing comprehensive farm facilities, and active involvement in statewide student leadership development activities. The participating deans were in various regions throughout the state. Participating deans were recruited via an email request to complete an online interview. The original five deans who were recruited all participated in the interviews.

Phase two included a survey that featured demographic, Likert-scale, and open-ended questions. The survey was a modified version of Sill's (2014) instrument. Modifications included additional questions developed from the qualitative interviews in phase one. These questions centered on the management of agricultural programs and, as such, were not included in the original instrument. Survey questions focused on deans' demographics, preparedness, administrative tasks, academic tasks, leadership tasks, and their thoughts concerning the attributes of effective CCC agricultural programs. The validity of Sill's (2014) instrument was ensured through formal pilot testing by a panel of CCC experts (Fraenkel et al., 2012). Reliability of the instrument used in this study was determined by Cronbach's alpha (α). George and Mallery (2003) provide the following rule of thumb for Cronbach's alpha interpretation, including "$\alpha > .9$ – excellent, $\alpha > .8$ – good, $\alpha > .7$ – acceptable, $\alpha > .6$ – questionable, $\alpha > .5$ – poor, and $\alpha < .5$ – unacceptable" (p. 231). Scores for Likert-scale items used in this analysis included 0.70 (Previous Work Experience), 0.86 (Administrative Activities), 0.86 (Academic Activities), 0.93 (Leadership Skills and Activities), and 0.94 (CCC Agricultural Program Activities).

A census was taken due to the small population size (*N* = 29). Ary et al. (2009) describe this survey as a census of intangibles, meaning that the survey was administered to the entire population and sought to measure psychological and sociological constructs, like attitudes and values. Participants included all CCC instructional deans who had direct administrative responsibility over an agricultural AD-T program. Survey participants were incentivized with a $20 Amazon gift card, given to all participants who submitted a survey. Doss at el. (2022) showed that incentives can be an effective means to increase response rate in agricultural education. Out of 29 deans contacted, 21 submitted a survey, leading to a 72.4 percent response rate.

Results

Phase 1

Five deans participated in the interviews. Participants included men and women who had a variety of years of experience in their roles as deans. Professional backgrounds of the deans included SBAE, community college agriculture faculty, grant administrators, and university administrators. Every effort should be made to protect the privacy of participants (Lichtman, 2013). As such, limited demographic data is shared. This study featured a limited population size (N = 29) where extra precautions were taken to protect interview participants' identities.

The steps prescribed by Ary et al. (2009) were used for qualitative data analysis. These steps included identifying codes, developing categories, and aggregating categories into themes. This process resulted in three themes focused on effective deans: (a) students first, (b) diverse responsibilities and challenges, and (c) interpersonal skills. Two themes emerged focused on effective programs: (a) industry-based and (b) quality outcomes.

Students First

One of the most apparent themes across all deans was the need to keep students first. Dean 2 summarized the theme well when making decisions, stating the main question driving his decision-making was, "Is it right for the students?" All five deans mentioned being connected with students, or observing student success, as the most rewarding aspect of their job. In their current role, much of their support is indirect. Yet, they still felt a strong connection between their efforts and the student experience. Examples included supporting faculty, obtaining resources, and building successful academic programs. Dean 1 described how she contributed to student success by supporting faculty, stating:

*In a nutshell, I would describe it (job responsibilities) as to give my faculty and staff the resources, support, knowledge, abilities, capacity to do what they need to do for quality programs and student success… My job is to help you. You tell me what you need. That is my job. Your job is to kick *** in the classroom.*

Dean 3 discussed his pride in the economic empowerment his programs provide students, noting how his college's one-year programs lead directly to gainful employment upon completion.

Diverse Responsibilities and Challenges

A second theme that arose is the diversity of responsibilities and challenges associated with the agricultural dean position. These responsibilities were broken down into the categories of operational management, financial management, and personnel management. Dean 4 summarized the responsibilities of an agricultural dean, comparing the responsibilities of his position relative to other instructional deans who oversee non-agricultural programs:

Anything within the (agriculture) department I'm responsible for... As an example, last week I had to deal with a truck fire. One of our trucks burned up. It had an electrical fire and its toast. Now I'm working with our risk management and the insurance assessor to assess the truck and see what's going on there. So that's unique. I mean, performing arts does not have that type of scenario.

Dean 3 added insights into the operational challenges specific to agricultural programs. He compared leading agricultural programs to running a small city, due to the high number of logistical components:

We just have so many working parts…you've got a whole city. And it's true…We've got trucks and trailers and we've got technicians… we do events, we do food, we do activities. We've got 300 head of livestock out there.

Multiple deans shared the challenges arising from limited budgets. This is especially acute during the current decline in community college enrollment across the state of California (Burke et al., 2022). Much of CCC funding is based on student enrollment. Codes that appeared under this category included "money manager" and "good stewards of the taxpayers' dollars." Dean 5, when asked about the most challenging aspects of her job, described the frustrations that occur when the college's funding formula changes. She shared that her agricultural programs fundraise for themselves, as opposed to other programs that can rely on district funding.

Interpersonal Skills

When asked about the top skills needed in the position, all five deans recognized interpersonal skills. These mainly included communication skills and leadership skills. Dean 2 describes how his leadership skills need to be flexible depending on his personnel:

Understanding the personnel, not only staff, but classified personnel, that you are over and figuring out a leadership style. Everybody has a leadership style, but sometimes you have to adapt your style to fit the personnel you have under you.

Dean 3, in describing his experience helping other agricultural programs outside his college, shared how interpersonal relationships can make or break programs:

Good teachers make good programs. You can have the best facilities in the world and all the money in the world, but if the teachers don't put in the time or are angry at each other, or someone else, it's not going to work.

Dean 5 stated that leadership and communications skills were a top priority for her, emphasizing the need for effective written and interpersonal communication, which includes being visible to her employees and not hiding out in her office.

Industry-based

Research question number two involved what deans believe are the characteristics of an effective CCC agricultural program. Agricultural programs are typically classified as career technical education (CTE) in the CCC framework. While this classification comes with perks, such as additional funding, it also requires CTE programs to be grounded in current industry practices. As such, all deans recognized the importance of having programs that mirror industry realities. Dean 1 described industry-based instruction as the most important part of an agricultural program. She specifically mentions faculty that are connected to industry and advisory committees:

I would say number one is connections to industry. Really super strong connections to industry first and foremost, in my opinion…Two of the things that I've really been focusing on since I got here, for all my programs is, number one, super relevant, super engaged advisory committees that are comprehensively representative of our community and what we're teaching or not teaching. And coupled with faculty that have not been hiding in the classroom for 30 years.

The California agriculture industry is diverse and includes a variety of regional commodities (California Department of Food and Agriculture, 2023). Dean 2 described the importance of agricultural programs meeting the needs of the local agriculture industry, and not necessarily meeting the needs for every agricultural area across the state. Dean 2 stated that agricultural programs have a responsibility to local taxpayers to focus on education that meets local needs.

Quality Outcomes

CCC agricultural deans noted the importance of having quality outcomes for their programs. Dean 1 described how CTE programs are expensive but benefit from the value they provide to colleges' job placement metrics:

All of these things are focusing on employment labor market data. Our mission as a college is to get people employed. I think that CTE deans, specifically, are going to be invited to the table more. They have to be. Is the dean of English going to help you with your employment numbers, right?

CTE deans hold much responsibility in making sure their colleges are meeting the workforce needs of their local communities. These outcomes are typically measured with metrics revolving around job placements and transfer rates.

Phase 2

Phase two was the quantitative portion of this study, with data collection facilitated via survey. Participants were mainly male, 61.9% (*N* = 13) and in their forties, 52.4% (*N* = 11), and predominately white, 71.4% (*N* = 15). Of note is how many deans were within their first five years in that role, 66.7% (*N* = 14). Most deans' highest degree earned was a master's degree, 71.4% (*N* = 15). A description of participants' demographic data can be found in Table 1.

Table 1

Survey Participants' Demographics

Characteristics	Participants	
	N	%
Gender		
Male	13	61.9
Female	8	38.1
Age		
30-39	1	4.8
40-49	11	52.4
50-59	3	14.3
60-69	4	19.0
n/a	2	9.5
Ethnicity		
Asian or Pacific Islander	3	14.3
Black/African American	0	0
Hispanic/Latino	2	9.5
Native American	0	0
White	15	71.4
n/a	1	4.8
Years in current position		
0-5	14	66.7
6-10	6	28.6
11-15	1	4.8
Years in the California Community College system		
0-5	2	9.5
6-10	6	28.6
11-15	3	14.3
16-20	6	28.6
21-25	2	9.5
25+	2	9.5
Highest degree earned		
Masters	15	71.4
Doctorate	6	28.6

Other demographic data focused on deans' colleges. Most deans worked at small (*N* = 12) and medium size colleges (*N* = 8), defined as annual full-time equivalent students (FTES) less than 10,000 and annual FTES between 10,000 and 20,000, respectively. Deans were in every CCC defined region except Orange County, where no agricultural AD-T is offered. Almost all colleges offered the agriculture plant sciences AD-T, 85.7% (*N* = 18). The second most popular degree was agriculture business, 76.2% (*N* = 16) followed by agriculture animal sciences, 57.1% (*N* = 12). Table 2 describes these demographics.

Table 2

Survey Participants' Colleges Characteristics

Characteristics	Colleges	
	N	%
College size		
Small (annual FTES less than 10,000)	12	57.1
Medium (annual FTES between 10,000 and 20,000)	8	38.1
Large (annual FTES greater than 20,000)	1	4.8
Regional Consortia		
Bay Area	2	9.5
Central/Mother Lode	8	38.1
Inland Empire/Desert	1	4.8
Los Angeles	1	4.8
North/Far North	6	28.6
Orange County	0	0
San Diego/Imperial	1	4.8
South Central Coast	2	9.5
Offer agriculture animal sciences AD-T degree		
Yes	12	57.1
No	9	42.9
Offer agriculture business AD-T degree		
Yes	16	76.2
No	5	23.8
Offer agriculture plant sciences AD-T degree		
Yes	18	85.7
No	3	14.3

Tables 3-6 described deans' perceptions of the role certain items play in being an effective agricultural dean. The Likert-scale range includes 1 = Unimportant to being an effective dean, 2 = Little importance to being an effective dean, 3 = Important to being an effective dean, 4 = Very important to being an effective dean, and 5 = Essential to being an effective dean.

Table 3 details what participants thought were valuable professional experiences in preparation for the deanship. The most valuable experience for deans was being an instructor, regardless of discipline, at the community college level (*M* = 3.62). Deans also valued grant management experience (*M* = 3.38) and professional experience in the agriculture industry (*M* = 3.00).

Table 3

Means and Standard Deviations for CCC Agricultural Deans' Previous Work Experience

Item	*N*	*M*	*SD*
Instructor (any discipline) at a community college	21	3.62	1.24
Work experience related to grant management	21	3.38	0.81
Professional experience (agriculture) outside of formal education	21	3.00	1.10
Department chair (any discipline) at a community college	21	2.90	1.14
Instructor (agriculture) at a community college	21	2.67	1.11
Department chair (agriculture) at a community college	20	2.30	0.98
Instructor (agriculture) at a high school	21	1.95	0.81
Work experience at a four-year university	20	1.95	0.83

Table 4 describes administrative activities. These items relate to the operational components of being a dean and excludes the academic components. All items were deemed, at a minimum, as being important to being an effective dean. The highest scored item was understanding and implementation of district policies and procedures (*M* = 4.60).

Table 5 describes the academic responsibilities of deans. Academic responsibilities include items like curriculum development, managing faculty, and grant writing. Like administrative activities, all items in this category were viewed, at a minimum, as important to being an effective dean.

Table 4

Means and Standard Deviations for CCC Agricultural Deans' Administrative Activities

Item	*N*	*M*	*SD*
Understanding and implementation of district policies and procedures	20	4.60	0.60
Ability to formulate and administer the unit budget	21	4.43	0.60
Time management & the prioritization of tasks	21	4.33	0.66
Ability to communicate budget allocations and strategies	20	4.30	0.66
Understanding of community college vision/philosophy	20	4.25	0.72
Understanding of human resources laws: Contractual, hiring, firing, and evaluation	21	4.24	0.77
Long-range budgeting and projections	20	4.15	0.75
Understanding and implementation of statewide policies and procedures	20	4.15	0.59
Equitable allocation of resources, both human and financial, in alignment with mission and vision of the college	21	4.10	0.63
Understanding of shared governance	21	4.10	0.63
Accounting & budget skills	21	3.90	0.77
Understanding of local, state, and federal policy and funding formulas	20	3.90	0.72
Computer proficiency: hardware and software applications	21	3.86	0.73
Knowledge of marketing & external public relations	20	3.65	0.81

Table 5

Means and Standard Deviations for CCC Agricultural Deans' Academic Activities

Item	*N*	*M*	*SD*
Management of faculty (hiring, scheduling, and evaluation)	20	4.45	0.61
Schedule development and assignment of classes	21	4.43	0.60
Enrollment management	20	4.20	0.77
Developing partnerships with employers	21	4.14	0.73
Dealing with student complaints and/or problems	21	4.05	0.74
Accreditation processes and procedures	21	4.00	0.84
Program development and implementation	21	4.00	0.84
Development of community partnerships	20	3.95	0.69
Program review for the division and/or department(s)	20	3.85	0.59
Understanding of effective teaching and learning methodologies	21	3.76	0.70
Development of effective advisory committees	21	3.62	0.92
Fundraising / Grant writing	21	3.57	0.81
Management of farm facilities/instructional laboratories	21	3.57	1.12
Curriculum development	21	3.43	0.93
Student recruitment	21	3.43	0.81
Development of distance education curriculum	21	3.05	0.74

Table 6 focuses on leadership skills and activities. These include technical skills, such as writing, as well as interpersonal skills, like motivating others. Nearly all items received a score of 4 or better, inferring the strong role leadership skills play in being an effective CCC agricultural dean.

Table 7 details deans' perceptions of the role certain items play in having an effective CCC agricultural program. Scaling in this table included 1 = Unimportant to having an effective program, 2 = Little importance to having an effective program, 3 = Important to having an effective program, 4 = Very important to having an effective program, and 5 = Essential to having an effective program. Results from this inquiry were surprisingly consistent, given the wide variety of agricultural programs across the state. The highest scored items were students engaged in hands-on learning (*M* = 4.65) and programs that meet the needs of the local agriculture industry (*M* = 4.44). Both these items are consistent with the two program-related themes from phase one of this study. The lowest scored item was having an on-campus farm pavilion (*M* = 2.94), which could be seen as a luxury and not necessarily essential to having an effective agricultural program.

Table 6

Means and Standard Deviations for CCC Agricultural Deans' Leadership Skills and Activities

Item	*N*	*M*	*SD*
Ability to lead change	20	4.55	0.61
Effective listening and feedback skills	20	4.55	0.61
Effective interpersonal skills	19	4.53	0.51
Ability to make data-driven decisions	20	4.50	0.61
Ability to motivate others	20	4.45	0.51
Incorporating ethics and values in workplace context	20	4.45	0.61
Ability to mediate between faculty and senior administration	20	4.35	0.67
Self-analysis and/or awareness	19	4.32	0.58
Conflict resolution, mediation, & negotiation skills	20	4.30	0.73
Creative and innovative thinker	18	4.28	0.67
Communicating a vision & mission that directs activities of the division or unit	19	4.26	0.65
Multicultural awareness	19	4.26	0.73
Networking skills	19	4.26	0.56
Facilitate communication between department, institution, and community	20	4.25	0.72
Short- and long-range planning abilities	20	4.25	0.72
Conducting effective meetings	20	4.15	0.59
Effective public speaking skills	20	4.10	0.64
Understanding of team dynamics	20	4.10	0.72
Effective writing skills	20	4.05	0.69
Ability to exhibit confidence within the position	19	4.05	0.71
Charismatic leadership style	19	3.68	1.00

Table 7

Means and Standard Deviations for Effective CCC Agricultural Program

Item	*N*	*M*	*SD*
Students engaged in hands-on learning	17	4.65	0.49
Programs that meet the needs of the local agriculture industry	18	4.44	0.62
Effective advisory committees	18	4.39	0.61
Industry/employer partnerships	18	4.33	0.77
Strong teamwork among faculty	18	4.22	0.73
Collaboration with high school agricultural programs	18	4.17	0.71
Successful job placement rates	18	4.06	0.87
Collaboration with university agricultural programs	18	4.00	0.77
On campus crop production and crop production facilities	18	3.83	0.62
Student leadership development opportunities	18	3.83	0.92
C-ID aligned agricultural courses	18	3.78	0.73
Hosting community-based events	18	3.78	1.06
Successful transfer rates	18	3.78	0.81
Student recruitment activities unique to agriculture	18	3.72	0.96
Agriculturally based clubs and student organizations	17	3.71	0.85
Dual enrollment courses with high school agricultural programs	18	3.67	0.69
Hosting FFA field days	17	3.65	1.06
Faculty willing to do “extra” without added compensation	18	3.61	1.09
On campus farm machinery and farm machinery instructional laboratories	18	3.56	0.78
On campus horticulture production and horticulture facilities	18	3.56	0.71
Distance education agricultural courses	18	3.39	0.70
On campus livestock and livestock facilities	18	3.11	1.18
On campus farm pavilion	18	2.94	1.06

Discussion and Implications

This study featured a two-phase sequential exploratory mixed methods design and was based off a similar CCC instructional dean study completed by Sill (2014). Five themes emerged from phase one. The first three themes related to being an effective dean and included students first, diverse responsibilities and challenges, and interpersonal skills. These themes were consistent with previous literature regarding effective CCC deans, including the desire to stay connected to students (Messina, 2008), the diversity of responsibilities associated with the role (Nguyen, 2014; Russ, 2006) and the need for effective interpersonal skills (Noble, 2006; Yamamura, 2020). The final two themes related to effective CCC agricultural programs and included programs that are industry-based and programs that produce quality outcomes.

Phase two of the study included a survey given to the population of deans (N = 29). Demographically, the dominant categories included white males in their forties who had a master's degree and less than five years in the deanship. Deans mainly came from small and medium colleges located across the state. The professional experience most valuable to deans in preparation for their role was serving as a community college instructor, regardless of discipline. This finding was consistent with other CCC literature where faculty leadership experience was seen as valuable preparation for the deanship (Sterling, 2019). For administrative tasks, deans most valued understanding and implementation of district policies and procedures and the ability to formulate and administer a budget. The most valued academic task included management of faculty (hiring, scheduling, and evaluation). Leadership skills and activities were highly valued by deans, as nearly all variables received an average score of 4, very important to being an effective dean, or greater. Scores for effective CCC agricultural programs were surprisingly consistent, given the variability of agricultural programs across the state. The highest valued variables for agricultural programs included students engaged in hands-on learning and programs that meet the needs of the local agriculture industry.

Findings from this study can support a variety of CCC stakeholders. CCC human resources departments can use these findings for professional development of CCC agricultural deans, where a lack of formal training is seen as a persistent problem among CCC deans (Nguyen, 2014; Sill, 2014). Professional associations can leverage these insights to develop formal programs to support CCC agricultural deans. This could include developing a mentorship program among CCC agricultural deans, which was proven valuable in the broader CCC dean context (McManus, 2013). This study also suggests that a localized, agriculturally focused training could increase deans' effectiveness. Ideas for professional development sessions grounded in this study's findings include implementing district policies and procedures, interpreting the California education code, tours of the local agriculture industry, effective interpersonal communication, and leading diverse teams.

The second research question evaluated deans' perceptions of what makes an effective CCC agricultural program. The most prevalent theme in this study's findings was industry-based programs. Steps that can be taken to develop industry-based programs include hands-on instruction, a focus on the local agriculture industry of that CCC, and strong advisory committees, among other factors. Additionally, participants from this study expressed the importance of supporting a collaborative environment within their programs. This includes internal collaboration among faculty and administrators, as well as developing partnerships with external entities, such as industry members, local high schools, and university agricultural programs. Results of these efforts should be evidenced in outcomes and metrics that can be leveraged to support future program development.

Recommendations

This study holds value for both scholars and practitioners. This study addressed a gap in agricultural education literature by focusing on community college agricultural programs, where only a handful of studies exist (Jones et al., 2020; Keith et al., 2010; Ricketts et al., 2005; Whorley et al., 2024). Additionally, this study's findings can be leveraged to develop professional development programs for CCC agricultural deans, leading them to be more effective in their roles (Nguyen, 2014; Sill, 2014).

While deans play a critical role in the effectiveness of agricultural programs, there are many other variables that contribute to a successful community college agricultural program that warrant investigation. For example, research can be completed into what students, faculty, farm staff, industry members, and other stakeholders think constitute an effective agricultural program. Additional research can investigate the experiences of CCC agricultural deans from underrepresented groups, who have likely experienced challenges connected to their identities in the CCC system (Blackwood, 2010; Fong-Batkin, 2011; Kobayashi, 2009; Reynolds, 2020). This study was also limited to California and can be expanded to include other states and regions. Additionally, this study's research design can serve as a framework to investigate other CTE programs, such as automotive, computer programming, and nursing.

Community colleges play a major role in our higher education system, including enrolling over 40 percent of all undergraduate students (Community College Research Center, 2021). These institutions hold a special place in many lives and were founded on the principles of accessibility, affordability, and equity. Perhaps more than any other academic institution, they empower people to efficiently change their life trajectory and obtain careers that lead to positive generational change. The hope of this study is that students who enroll in community college agricultural programs find their programs to be effective and that they achieve this positive life change. Effective programs ultimately start by having effective deans leading these programs.

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