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Instructor Perception of Incorporating Active Learning in College of Agriculture Classrooms

ABSTRACT

Significant numbers of studies declare the effectiveness of "active learning" and numerous universities develop programs to support the incorporation of active learning methods, yet despite various incentives, adoption is met with resistance. This work shares the results of a study of instructor perceptions about active learning at a large research university in the United States. Instructor motivation, perceptions of competence and autonomy (related to colleagues and administrators), experience in training programs, as well as actual practices were explored with regard to active learning. Drawing on self-determination theory, this exploratory study will help universities in developing strategies for increasing the adoption of evidence-based teaching practices. Our results suggest that the work climate related to colleagues, gender, and participation in a Faculty Learning Community influenced both the implementation and motivation to implement active learning in the classroom.

KEYWORDS

active learning, motivation, instructor, Faculty Learning Community

INTRODUCTION

Didactic lecturing is the most common form of instruction across institutions of higher learning. This teacher-centered methodology is highlighted by passive student participation and unidirectional knowledge transmission from the instructor to the students. However, in this environment, students are often less engaged and are rarely viewed as partners in the learning process (Cook-Sather, Bovill, and Felten 2014). A 2014 metaanalysis of 225 studies revealed that students in courses utilizing traditional lecturing were 1.5 times more likely to fail compared with students taught in student-centered learning environments (Freeman et al. 2014). Furthermore, student retention rate of material is often lower in lecture-based courses (Deslauriers et al. 2019). In contrast, student-centered learning environments commonly emphasize the meaning of the material and provide students with more autonomy and independence in the learning process.

Instructors are frequently encouraged to adopt student-centered teaching methods in their courses to encourage student engagement. Student-centered teaching not only engages students in the learning process, but it provides students a platform to reflect on the process and autonomy over the process (Weimer 2013). Active learning is one example of a student-centered approach that can promote student interest and lead to improved learning and academic achievement (Freeman et al. 2014; Harackiewicz, Smith, and Priniski 2016). Interested students are more likely to be attentive and persistent in the classroom (Hidi and Renninger 2006). Involvement in active learning can also support

student interest and motivation by satisfying the student's need for autonomy and relatedness (Deci 1992). However, despite the documented benefits, there is still a resistance by instructors to adopt these evidence-based practices in their classroom (Michael 2007; Noben, Deinum, and Hofman 2022).

For many instructors, there are a number of factors and perceived barriers that limit the usage of active learning in their classrooms. Barriers may begin at the level of the department or college, where the culture and/or leadership may play a role in adoption (Cornejo Happel and Song 2020). Instructors report needing incentives to make the pedagogical transition from the familiar lecture style format to that of active learning (Wieman, Perkins, and Gilbert 2010). Additional departmental support is one way to demonstrate the department's commitment to instructors making this transition. Instructors report feeling comfortable teaching with traditional teacher-centered pedagogies and express concerns that transitioning to active learning may negatively impact their course evaluations (Michael 2007; Miller and Metz 2014). This is especially true for pre-tenure faculty who have added concerns related to the promotion and tenure process (Wieman, Perkins, and Gilbert 2010). The transition to an active learning classroom environment may also be perceived as relinquishing control and more time consuming because instructors must prepare course activities (Holec and Marynowski 2020; Michael 2007).

Considering these commonly reported barriers to adoption, our study focuses on instructor motivation to implement active learning in the classroom. To do this, we draw on self-determination theory (Ryan and Deci 2017), a theory of human motivation. Self-determination theory focuses on the degree to which an environment meets people's three basic psychological needs: competence, autonomy, and relatedness. The theory predicts that as the three basic psychological needs are met in an environment, people are more likely to internalize motivation for action. In doing so, they distinguish six categories of motivation listed from most external and controlled in perception to most autonomous and internalized (Table 1).

Table 1. Motivation continuum described by Deci (1992)

Amotivation	Controlled motivation		Autonomous motivation		
Amotivation	Extrinsic motivation				Intrinsic motivation
Impersonal regulation	External regulation	Introjected regulation	Identified regulation	Integrated regulation	Intrinsic regulation
the lack of motivation to do a task	completing a task based on rewards and/or punishments	completing a task to avoid guilt or shame	completing a task with the conscious recognition that its goals align with one's internal goals or aims	the perception that the task fully aligns with one's sense of self even though it shares an external source	doing something out of interest, fun, or enjoyment, often with little connection to external factors

In particular, we highlight the four middle types of motivation, which all deal with the ways traditionally termed "extrinsic" motivation may or may not be internalized. Recognizing that institutions have an interest in promoting active learning, instructors' motivation for using active learning most often falls into one of these categories. Motivation quality can be examined by distinguishing between the broad categories of controlled motivation, which reflects types of motivation with an external perceived locus of causality (EPLOC) (external and introjected regulation) from autonomous motivation (identified, integrated, and intrinsic regulation) where there is an internal perceived locus of causality (IPLOC) (de Charms 1968; Ryan et al. 2021). Because amotivation involves neither internal or external factors motivating action, we omit it from these categories (Ryan and Deci 2020).

With the benefits of active learning clearly established, it is important that professional development opportunities are created for instructors to encourage the adoption of student-centered pedagogies. Providing a space for colleagues to discuss teaching strategies, successes, and failures will assist in promoting an environment that encourages instructor engagement not only with their colleagues, but the students in their classrooms (Grunefeld et al. 2022; Moore, Fowler, and Watson 2007). This will also create a work climate that encourages engagement and may increase motivation to implement student-centered instruction in courses.

PURPOSE AND OBJECTIVE

The purpose of our study was to explore instructor motivation, perceptions of competence and autonomy (related to colleagues and administrators), and experience in training programs, as well as actual practices with regard to active learning. Based on this, we will address the following research questions:

1. How does work climate influence motivation and implementation of active learning strategies?
2. What types of motivation lead to increased implementation of active learning strategies?
3. Which demographic factors increase motivation and implementation of active learning strategies?
4. How do faculty learning communities (FLC) development programs differ in their effects on faculty outcomes from other types of development programs?

METHODS

Participants

All procedures for this study were approved by the university's institutional review board. A survey examining instructor perceptions of active learning was sent to all faculty and staff in the College of Agriculture, which included graduate students and postdoctoral scholars. The instructions in the email asked those who teach a course in the college to please complete the survey. The survey was made available January 21, 2020, and closed February 3, 2020, which was one month prior to the COVID-19 pandemic impacting a move to virtual instruction. When the survey was administered, approximately 280 faculty and staff in the College of Agriculture had an instructional role, and a total of 116 instructors completed the survey (41% response rate). Participation was incentivized by offering five randomly drawn Amazon gift cards. The gender breakdown of participants was 30% female, 63% male while the remaining 7% selected "non-binary" or "prefer not to answer." The largest proportion of respondents were tenured faculty (48%) followed by staff (18%) and pre-tenured faculty (15%) while the remaining

respondents were other (6%), non-tenure-track faculty (5%) and administration (4%). The majority of the participants (N=63) stated that teaching was not a large percentage of their role at the university (0–25%) while smaller numbers said teaching made up 26–50% (N=32), 51–75% (N=12) or 76–100% (N=10) of their role at the university (see Table 2 for all participant demographics).

Table 2. Participant demographics by faculty development participation

		Faculty Development Participation		
	Total	FLC participants	Other development	No development
Gender				
Male	35 (30%)	13 (42%)	18 (28%)	4 (20%)
Female	73 (63%)	16 (52%)	42 (65%)	15 (75%)
Non-Binary/Prefer not to answer	8 (7%)	2 (7%)	5 (8%)	1 (5%)
Rank				
Administration	5 (4%)	0 (0%)	3 (5%)	2 (10%)
Tenured Faculty	56 (48%)	16 (52%)	31 (48%)	9 (45%)
Pre-Tenured Faculty	17 (15%)	8 (26%)	7 (11%)	2 (10%)
Non-Tenure-Track	6 (5%)	2 (7%)	3 (5%)	1 (5%)
Staff	21 (18%)	5 (16%)	12 (19%)	4 (20%)
Other	7 (6%)	0 (0%)	6 (9%)	1 (5%)
Teaching percentage				
0–25%	62 (53%)	12 (39%)	35 (54%)	15 (75%)
26–50%	32 (28%)	10 (32%)	17 (26%)	5 (25%)
27–75%	12 (10%)	5 (16%)	7 (11%)	0 (0%)
76–100%	10 (9%)	4 (13%)	6 (9%)	0 (0%)

Note: Percentages may not add to 100% due to missing data and/or rounding

Instrumentation/data collection
Work climate

Instructors completed two scales on work climate (adapted from Baard, Deci, and Ryan 2004 to apply to college teaching). The first scale was adapted to focus on participants' feelings about support from their colleagues (e.g. "I feel that my colleagues support my choices and options in how I teach") and the other scale was adapted to focus on participants' feelings about support from the administration

(e.g. "I feel my teaching approach is understood by my administrators"). See Appendix for the full versions of each scale. Each subscale contained six items including one reverse-coded item on a 7-point Likert scale (1 = "strongly disagree" to 7 = "strongly agree"). Both subscales were found to be highly reliable in our sample (colleagues: α = .85; administration: α = .91).

Active learning competence

Instructors completed a four-item scale (adapted from Williams and Deci 1996) measuring their experience and comfort with active learning strategies (α = .93). All four items were on a 7-point Likert scale. An example item is "I am able to achieve my goals through active learning practices."

Motivation for active learning

Instructors completed an 18-item scale measuring self-determined motivation for incorporating active learning into their teaching (modified from Guay, Vallerand, and Blanchard 2000). The scale includes six subscales spanning Deci and Ryan's self-determined motivation spectrum (1985, 2000). Each subscale included three items on a 7-point Likert scale:

- intrinsic motivation (e.g. "Because I really like it"; α = .92)
- integration (e.g. "Because learning all I can about effective teaching is really essential for me"; α = .74)
- identification (e.g. "Because it allows me to develop skills that are important to me"; α = .77)
- introjection (e.g. "Because I would feel guilty if I didn't"; α = .78)
- extrinsic motivation (e.g. "Because that's what I was told to do"; α = .74)
- amotivation (e.g. "I don't know. I have the impression I'm wasting my time with active learning"; α = .90).

An "autonomous motivation" variable (M = 5.15, SD = 1.03) was created by calculating the mean of intrinsic motivation, integration, and identification. A "controlled motivation" variable (M = 3.06, SD = 1.13) was created by calculating the mean of introjection and extrinsic motivation.

Teaching development activities

Instructors were provided with a list of 10 teaching development programs and activities and were asked to indicate which they had participated in. The programs included faculty learning communities (FLC), teaching workshops, pedagogical trainings from other institutions, and participation in scholarship of teaching and learning projects. The final list was selected based on activities offered at the institution and by consulting with the staff at the university's center for instructional excellence to determine which of the institutional activities were commonly implemented at similar institutions. An "other" category was also provided for instructors to list any additional development activities. A "teaching development" score was created by adding up the number of development activities that each instructor participated in which ranged from 0 to 7 (M = 1.74, SD = 1.57).

Teaching and learning strategies

Instructors were provided with a list of 15 teaching and learning strategies and were asked to indicate which they used often, which they have tried or used occasionally, and which they were unfamiliar with or did not use. Some examples of strategies include class discussion, problem-solving

tasks, student collaboration and group work, case-based learning, and mid-semester feedback. The 15 strategies were selected after consulting with the institution's center for instructional excellence. An "other" category was also provided to instructors to list any additional strategies. An "active learning strategies" score was created by weighting the respondents' answers (used often = 2, have tried = 1, don't use = 0) and adding up the number of teaching and learning strategies that instructors incorporate into their courses (range from 0 to 29; $M = 11.65$, $SD = 6.69$).

FINDINGS

Prior to analysis, all variables were examined to determine distributional fit, identify any missing data, and examine the assumptions of multivariate analysis. All variables were found to be normally distributed; skewness values ranged from -.64 to .79 and kurtosis values ranged from -.44 to .69. Two participants did not complete the entire survey so their responses were dropped, making our total N = 114.

Correlations

The descriptive statistics and correlation coefficients are presented in Table 3. Interestingly, while work climate related to colleagues had significant correlations with autonomous motivation ($r = .25$) and active learning competence ($r = .26$), work climate related to administrators did not show any significant correlations to any variables besides the other work climate subscale.

Table 3. Descriptive statistics and correlation coefficients between all constructs

| Measure	1.	2.	3.	4.	5.	6.	7.
1. Work climate (colleagues)	1.00						
2. Work climate (administrators)	.50**	1.00					
3. Active learning competence	.26**	.14	1.00				
4. Autonomous motivation	.25**	.10	.59**	1.00			
5. Controlled motivation	-.08	-.09	-.24*	-.05	1.00		
6. Development activities	.04	.11	.26**	.30**	-.15	1.00	
7. Active learning strategies	.11	.04	.51**	.37**	-.26**	.50**	1.00
Mean	4.81	4.57	5.39	5.15	3.06	1.74	11.65
SD	0.85	1.04	1.20	1.03	1.13	1.57	6.69

Note: *p<.05; **p<.01

Faculty learning community participation

In order to examine the effects of participating in a FLC, we ran a series of one-way ANOVAs (Figure 1) which compared instructors who had gone through one of our two FLC programs (N = 31), instructors who had done other types of teaching development (N = 65), and instructors who had not

gone through any development activities (N = 20). Bonferroni post-hoc tests were run for pairwise comparisons for each analysis. Instructors who participated in an FLC felt significantly more competent in using active learning in their courses ($M = 5.89$, $SD = .89$) than the other-development instructors ($M = 5.26$, $SD = 1.24$) and no-development instructors ($M = 5.14$, $SD = 1.29$; $F(2) = 3.89$, $p < .05$). FLC instructors ($M = 16.13$, $SD = 5.10$) also used significantly more active learning strategies in their courses than other-development instructors ($M = 12.38$, $SD = 5.57$) and both groups used more active learning than no-development instructors ($M = 6.33$, $SD = 6.32$; $F(2) = 24.74$, $p < .01$). Motivationally, FLC instructors felt significantly more autonomous motivation ($M = 5.49$, $SD = 0.83$) than the instructors who had no development ($M = 4.77$, $SD = 1.22$; $F(2) = 3.18$, $p < .05$). No significant differences were found for either work climate subscale or controlled motivation.

Figure 1. The effects of faculty learning community participation on active learning variables
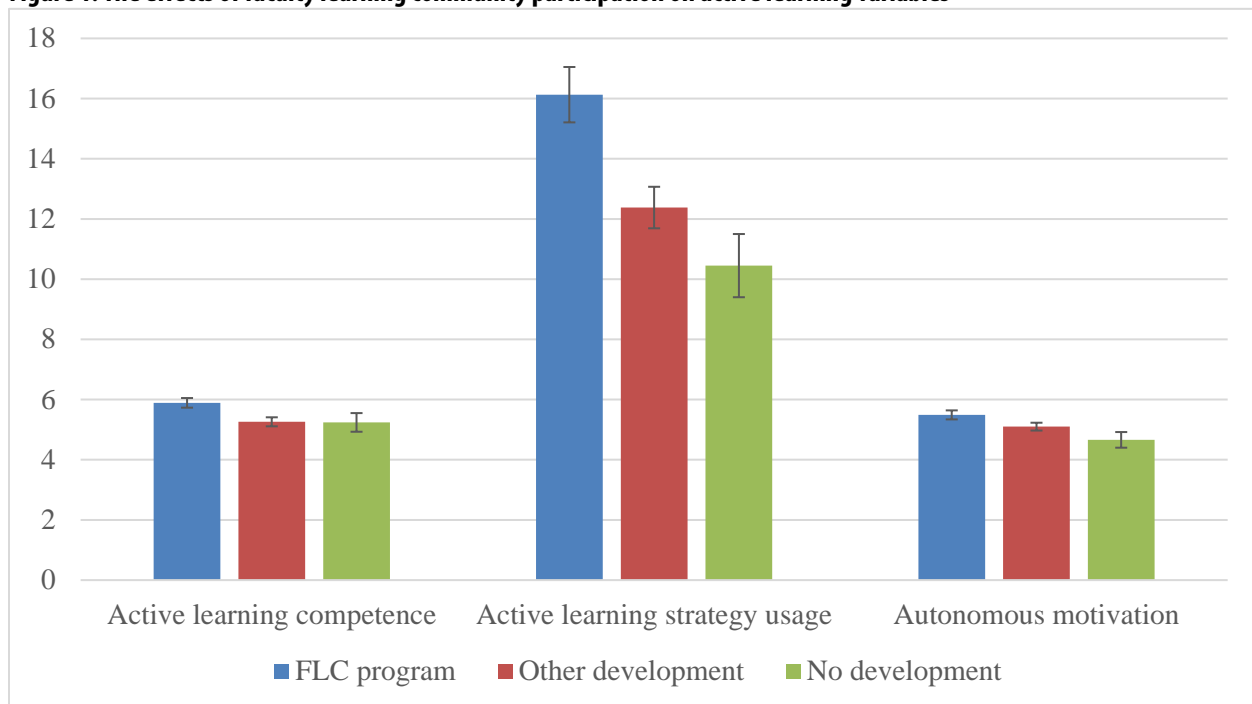
Gender differences

We examined gender differences by comparing male instructors (N=73) to female instructors (N=35) using independent samples t-tests (Figure 2). Female instructors felt significantly more competent in using active learning in their courses ($M = 5.83$, $SD = 1.14$) than male instructors ($M = 5.24$, $SD = 1.22$; $t(105) = 2.38$, $p < .05$). There were also significant differences in instructor motivation for using active learning strategies by gender: compared to males ($M = 4.98$, $SD = 1.01$), female instructors felt more autonomous motivation ($M = 5.61$, $SD = 0.85$; $t(103) = 3.16$, $p < .01$). Finally, female instructors ($M = 2.37$, $SD = 1.66$) participated in significantly more teaching development activities than male instructors ($M = 1.71$, $SD = 1.45$). No significant differences were found for either work climate subscale, the number of active learning strategies used, or controlled motivation.
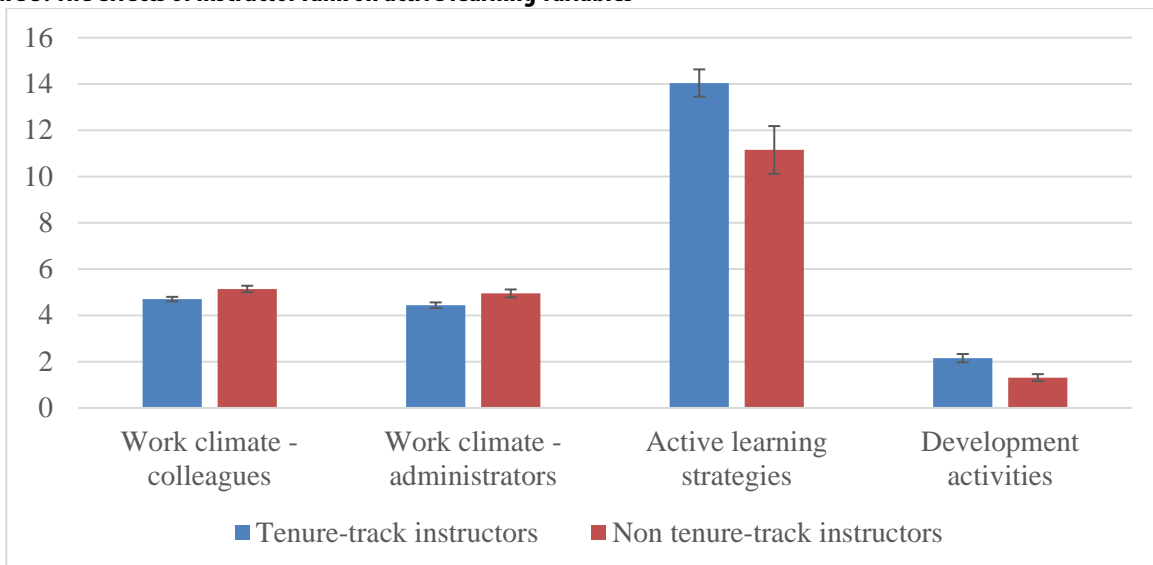
Figure 2. The effects of instructor gender on active learning variables
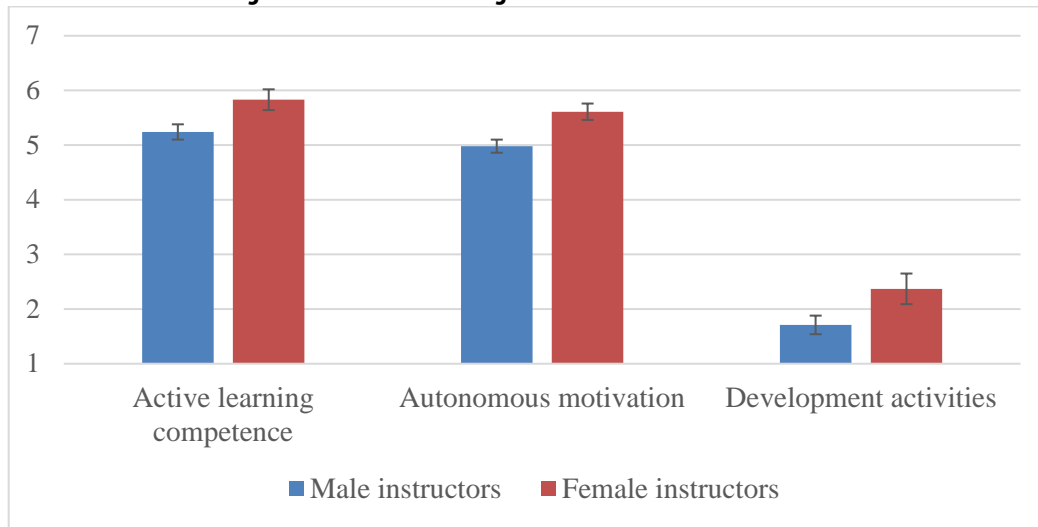
Tenure-track vs. non-tenure-track faculty

To examine how instructor role influenced active learning, we compared tenure-track faculty (N=73) to non-tenure track faculty/staff (N=35) using independent samples t-tests (Figure 3). Tenure-track faculty (M = 4.73, SD = 1.33) rated their work climate with administrators significantly worse than non-tenure track faculty/staff (M = 5.49, SD = 1.15; $t(110)$ = -2.88, $p < .01$). Tenure-track faculty also reported using more active learning strategies (M = 13.86, SD = 5.44) than non-tenured track faculty/staff (M = 11.15, SD = 6.01; $t(111)$ = 2.36, $p < .05$) as well as participating in marginally more significant development programs than non-tenured track faculty/staff (tenure-track: M = .21, SD = .16; non-tenure track: M = .15, SD = .13; $t(111)$ = 1.90, $p = .06$). Motivationally, tenure-track faculty had less integration (M = 5.04, SD = 1.15) than non-tenure track faculty/staff (M = 5.62, SD = 1.06; $t(108)$ = -2.47, $p < .05$). No other significant differences were found in the motivation of tenure track and non-tenure track faculty.

Figure 3. The effects of instructor rank on active learning variables

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Motivation on active learning competence

Multiple linear regression was used to test if autonomous motivation, controlled motivation, and amotivation significantly predicted active learning competence (Table 4). The overall regression was statistically significant ($R^2 = .40$, $F(2, 110) = 24.32$, $p < .01$). Autonomous motivation positively predicted active learning competence ($\beta = .49$, $p < .01$) while controlled motivation negatively predicted active learning competence ($\beta = -.16$, $p = .06$) and amotivation did not predict active learning competence ($p = .25$).

Table 4. Regression results examining motivation on active learning competence and active learning strategies usage

Variable	B	95% CI	β	t	p
Active learning competence					
Autonomous motivation	.56	[.32, .80]	.49	4.61	.000
Controlled motivation	-.17	[-.35, .00]	-.16	-1.94	.055
Amotivation	-.12	[-.33, .08]	-.13	-1.17	.245
Active learning strategies usage					
Autonomous motivation	1.95	[.60, 3.30]	.35	2.87	.005
Controlled motivation	-1.23	[-2.20, -.25]	-.24	-2.50	.014
Amotivation	-.03	[-1.18, 1.12]	-.01	-.06	.954

Note: Active learning competence $R^2 = .40$; Active learning strategies usage $R^2 = .20$

Motivation on active learning usage

Multiple linear regression was used to test if autonomous motivation, controlled motivation, and amotivation significantly predicted instructors' use of active learning (see Table 3). The overall regression was statistically significant ($R^2 = .20$, $F(3, 110) = 8.97$, $p < .01$). Autonomous motivation positively predicted active learning usage ($\beta = .35$, $p < .01$), while controlled motivation negatively predicted active learning usage ($\beta = -.24$, $p < .05$), and amotivation did not predict active learning usage ($p = .95$).

SUMMARY AND RECOMMENDATIONS

Despite the established benefits of student-centered teaching, there is still limited adoption in higher education. There are a number of factors and perceived barriers that may limit the implementation of active learning in classrooms by instructors. This section summarizes the findings of the four research questions seeking to better understand instructor motivation and experiences with active learning in the College of Agriculture.

Research question #1: How does work climate influence motivation and implementation of active learning strategies?

Work climate is a measure of an individual's perception of the work environment and is important in determining a person's satisfaction with their role in the organization (Thompson 2005). In our study, work climate related to colleagues was positively correlated to active learning competence. Academic colleagues can have a large impact on mentoring, building confidence, and promoting conversation to foster change in teaching practices (Tovar et al. 2015). For example, FLC can provide a space for faculty to engage with others interested in best pedagogical practices. Faculty may be motivated to join because of a desire to build a sense of community and improve their own teaching through discussion with others (Dalgarno et. al. 2020).

Work climate was also positively related to autonomous motivation. Faculty that adopted active learning strategies in their classroom were more likely to do so because the action aligned with their individual, intrinsic goals. This type of motivation may encourage faculty to engage with colleagues in discussions on the role of active learning in the classroom. Gorozidis and Papaioannou (2014) reported that autonomous motivation predicted an instructor's intention to participate in teaching training programs. In our study, autonomous motivation positively predicted self-reported active learning competence and active learning implementation. Instructor self-reported autonomous motivation has also been positively linked with students' self-reported autonomous motivation for learning (Roth et al. 2007). These results suggest that departments should adopt strategies to create more needs-supportive environments. Participants in such an environment may invest more in supportive peer relationships and communication with colleagues on the topic of teaching.

Like colleagues, administrators play a role in influencing the work climate of a unit or department. Departments can provide a supportive environment and resources to encourage teaching discussions and emphasis on the value of teaching and learning to the organization. Creating a culture that values teaching can increase instructors' autonomous motivation and engagement in student-centered pedagogies. Interestingly, in our study, perceptions about administration did not have a significant impact on an instructor's decision to implement active learning in the classroom or participation in FLC.

Research question #2: What types of motivation lead to increased implementation of active learning strategies?

As previously discussed, autonomous motivation in our study positively predicted an instructor's active learning competence and probability of implementing active learning in the classroom. In contrast, instructors in our study who expressed controlled motivation were less likely to feel competent in active learning pedagogies and were less likely to implement active learning strategies in the classroom. In controlled motivation, a person may participate in activities because they are seeking an external reward or fear that their lack of involvement may result in some form of punishment (Ryan and Deci 2020). Instructors that feel controlled motivation may feel pressure to incorporate active learning pedagogies in the classroom. Additionally, they may utilize active learning strategies only because they feel guilty for not including them. With this approach, active learning may not be implemented in an effective way and instructors therefore may lose the benefits of active learning for their students (Bonem, Fedesco, and Zissimopoulos 2020).

Amotivation did not predict either instructor active learning competence or active learning implementation. Instructors with amotivation may lack the competence to complete a task or feel that the outcome of the task is beyond their control.

Research question #3: Which demographic factors increase motivation and implementation of active learning strategies?

There were no significant differences between the number of active learning strategies employed across gender, but competence and attitudes did reveal differences. Female instructors reported feeling more competent in using active learning strategies as well as greater autonomous motivation for using these strategies than male instructors, despite no significant differences in reported participation in training programs. Similar disparities were found with regard to instructor rank, with tenure-track instructors reporting greater competence and more participation in developmental opportunities. These are both worthy of further exploration, in future studies with larger sample sizes to understand the intersections of demographic factors. Additionally, we will need to explore whether or not the promotion, availability, and encouragement to participate in development opportunities leads to differential participation, particularly by rank.

Research question #4: How do FLC development programs differ in their effects on faculty outcomes from other types of development programs?

One of the driving questions of our study involved an attempt to understand how different types of professional development activities influence teaching behaviors. To begin to answer this question, we compared programs designed as FLC, which included a variety of types of programs offered by the institution, such as a semester-long course design program and programs for new faculty, both at the college and university level, to other developmental programs and found that the FLC programs showed stronger positive associations. This included increased competence and greater variety of active learning techniques as well as more intrinsic motivation and less amotivation in implementing these techniques. Further research might explore whether this motivational profile precedes participation in these programs, which are largely voluntary. Similarly, participants in other educational development opportunities showed greater use of active learning techniques than those with no development. Future studies may explore time invested as a means of comparing FLC participation with other opportunities (some of which can still have significant time investment). Future research could also further explore distinctions between other types of teaching development programs to more fully determine which programs have the greatest impact.

LIMITATIONS

The participants in this study represent one cohort of instructors from a College of Agriculture. Our responses may not be fully representative of the entire college and varying demographics within the college. Faculty may not see teaching as a large percentage of their role and this may have influenced their participation in the survey. Additionally, this study relied on self-reporting from participants. As a result, we cannot guarantee that respondents were not influenced and biased by social desirability. Future opportunities exist to explore instructor perceptions at other agricultural colleges and to promote engagement of faculty with a lower teaching appointment.

CONCLUSIONS

The benefits of active learning on student engagement are well established, but many instructors are still hesitant to adopt this strategy in their classrooms. Moving forward, professional development programs should focus on opportunities to develop instructors' autonomous motivation. This may be accomplished by promoting informal discussions about teaching, creating quorums for sharing ideas and teaching practices, and creating supportive environments among colleagues that encourage discussion. College administration can encourage participation in these programs and others, such as FLC. Based on the self-determination theory, encouraging an environment that promotes teacher autonomous motivation may not only promote teacher perceived accomplishment, but also influence students' autonomous motivation for learning (Roth et al. 2007). Perhaps equally important, discussion must be had on college campuses about the value of teaching and the importance of adopting evidence-based teaching strategies.

AUTHOR BIOGRAPHIES

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APPENDIX

Work Climate Questionnaire - Colleagues

Question Text: The following questions ask about the support you receive in your department/college/institution from colleagues about your teaching choices.

Individual Items:
1. I feel that my colleagues support my choices and options in how I teach.
2. I feel my teaching approach is understood by my colleagues.
3. My colleagues convey confidence in my ability to teach effectively.
4. My colleagues encourage me to ask questions about teaching.
5. My colleagues listen to how I would like to do things in my classroom.
6. I don't feel very good about the way my colleagues talk to me about teaching. (R)

Work Climate Questionnaire - Administration

Question Text: The following questions ask about the support you receive in your department/college/institution from administrators about your teaching choices.

Individual Items:
1. I feel that my administrators provide me choices and options in how I teach.
2. I feel my teaching approach is understood by my administrators.
3. My administrators convey confidence in my ability to teach effectively.
4. My administrators encourage me to ask questions about teaching.
5. My administrators listen to how I would like to do things in my classroom.
6. I don't feel very good about the way my administrators talk to me about teaching. (R)

Active Learning Competence

Question Text: The following questions ask about your experience and comfort with active learning.

Individual Items:
1. I feel confident in my ability to adopt active learning practices.
2. I am capable of teaching through active learning.
3. I am able to achieve my goals through active learning practices.
4. I feel capable of meeting the challenges in adopting active learning practices.

Motivation for Adopting Active Learning

Question Text: The questions below are related to your feelings toward adopting active learning practices in your teaching. Faculty have different motivations for adopting active learning practices, and we are interested in your motivations for doing so thus far. Your responses are confidential. Please be honest and candid. Use the scale provided below to answer each item.

Why might you adopt active learning practices in your teaching?

Individual Items:

1. Intrinsic Regulation
   a. Because I really enjoy it.
   b. Because I really like it.
   c. Because it's really fun.
2. Integration
   a. Because learning all I can about effective teaching is really essential for me.
   b. Because acquiring all kinds of knowledge and skills is fundamental for me.
   c. Because experiencing new things is a part of who I am.
3. Identification
   a. Because it allows me to develop skills that are important to me.
   b. Because it's a sensible way to get a meaningful teaching experience.
   c. Because it's a practical way to teach my classes.
4. Introjection
   a. Because I would feel bad if I didn't.
   b. Because I would feel guilty if I didn't.
   c. Because I would feel awful about myself if I didn't.
5. Extrinsic Regulation
   a. Because I feel I have to.
   b. Because that's what I'm supposed to do.
   c. Because that's what I was told to do.
6. Amotivation
   a. I don't know. I have the impression I'm wasting my time with active learning.
   b. I'm not sure anymore. I think that maybe I should quit using active learning.
   c. I don't know. I wonder if I should continue.