

Describing the Impacts of Group Work on Leadership Traits

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Group work allows students to expand their own leadership traits. Defined as a selfless devotion to a group or organization (Nandasinghe & Gimhani, 2005), leadership is constructed from a variety of traits which are developed through continuous self-study, training, and education (Santos et al., 2015). Group assignments are a common leadership training method in secondary and post-secondary education. Through the act of group work the individuals are either given or appointed a leader within the group itself. The individuals within the group can create a model of what good leadership is and choose to develop personal traits that they see from others. Group work provides an opportunity to experience what works in each situation and what leadership traits they prefer in a group work environment (Kuisma, 1998). The skills are developed through the act of working with others and taking a lead on part of the project. The development of leadership traits impacts the overall performance of the group. There are numerous benefits to the collaborative learning approach of group work (Amanchukwu et al., 2015). The social interactions tap into students' natural motivations to communicate with their peers while benefiting from the strengths and knowledge of fellow team members (Laal & Ghodsi, 2012). Group work also provides self-reflection opportunities for individuals to assess their own leadership skills in a real-world environment (Ghavifekr, 2020).

The context for this study was the Chico State and Butte College Field Day with over 20 different Career Development Event competitions and attended by over 1,000 school-based agricultural education (SBAE) students. The Field Day Leadership Team is selected from California State University, Chico (Chico State) undergraduates and represents a wide range of majors. The team is divided into eight committees, each tasked with a specific component of the event.

Functional leadership provided the conceptual framework of this study. In functional leadership, team effectiveness is derived from the actions and attitudes of individual members (Zaccaro et al., 2001). Additionally, functional leadership suggests the engagement in an effective team environment builds additional leadership skills in members that in turn benefits the larger team (Santos et al., 2015). By assessing the contributions and growth of team members, we were able to measure the leadership effectiveness of the 2023 and 2024 Field Day Leadership Teams.

Procedures

The purpose and objective of this project were to describe the means and standard deviations of participants' perceived contribution and growth in identified variables. The instrument was designed with constructs from Headrick and Fischer (2022). Participants were asked to rank their contributions to the team and their perceptions of strengthened abilities as a result of their committee work. The instrument was analyzed by experts in social science research for face and content validity. Post-hoc reliability tests returned a Cronbach's Alpha of 0.86. Members of the 2023 and 2024 Field Day Leadership Team were given the electronic instrument as a self-reflection the week following the event. In 2023, 93% of members completed the instrument and 87% of members completed the instrument in 2024. Data were analyzed using descriptive statistics.

Findings

Descriptive statistics are found below in Table 1. Team members reported moderate to full personal contributions to the team on all constructs. Additionally, they agreed this experience strengthened their abilities in all identified components of teamwork. Standard deviations ranged from 0.36 to 0.83.

Table 1.

Descriptive Statistics

	2023 (<i>n</i> = 33)		2024 (<i>n</i> = 24)		Overall (<i>n</i> = 57)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Contributions to the Team*						
Adaptability	3.85	0.36	3.79	0.51	3.82	0.43
Coachability	3.67	0.48	3.79	0.51	3.72	0.49
Equitable Work	3.73	0.52	3.63	0.58	3.68	0.54
Determinism	3.85	0.36	3.75	0.44	3.81	0.40
Inclusiveness	3.85	0.36	3.92	0.41	3.88	0.38
Communication	3.85	0.36	3.63	0.49	3.75	0.43
Strengthened Abilities ⁺						
Adaptability	4.48	0.80	4.63	0.49	4.54	0.68
Coachability	4.39	0.83	4.42	0.58	4.40	0.73
Equitable Work	4.48	0.83	4.33	0.56	4.42	0.73
Determinism	4.52	0.83	4.46	0.59	4.49	0.73
Inclusiveness	4.58	0.79	4.58	0.50	4.58	0.68
Communication	4.55	0.79	4.50	0.59	4.53	0.71

Note: * = Items on a 4-point scale. + = Items on a 5-point scale.

Conclusions, Recommendations, and Implications

The Field Day Leadership Team is an impactful event on the leadership traits of Chico State students. All means fell at the highest point of each scale. The relatively low standard deviations point to a tight range of scores. Participants found they both contributed to the success of the team while also improving their abilities in the various leadership skills. This impactful experience continued through the changes to committee structure and reduced team size between the 2023 and 2024 events.

The Chico State and Butte College Field Day is a well-known event throughout California SBAE. This large event creates a meaningful context for the group work. The applicability of tasks may provide additional motivation to contribute to the efforts and increase a perception of personal benefit (Zaccaro et al., 2001). We recommend educators ensure group work tasks are made relevant to participants and to create buy-in from team members. By assessing members' perceptions of their performance and growth, leadership educators may be better able to refine their group work assignments and efforts, in turn improving students' leadership skills (Santos et al., 2015). We recommend further replication and development of the identified constructs to assess leadership development through group work.

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