

Does Structure Alter Students' Perceptions of Group Projects?

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Background and motivation

"What I learned from this group project is that I don't like to work in groups. I do better work by myself."

Ettington, D.R. and R.R. Camp. 2002. Facilitating transfer of skills between group projects and work teams. Journal of Management Education 26(4):356-379.



Background and motivation

- AGR 215: Farm Supply & Food Industry Management
 - Senior-level agribusiness course
 - Implemented a semester-long group project
 - Key components include:
 - DISC
 - Scaffolding
 - Group norms
 - Individual reflection



Background and motivation

- "Our group has worked very well together and I've been pleasantly surprised."
- "If I'm being honest, this is probably the smoothest group project I've ever participated in."
- "I find this to be the best group project I've ever worked on."
- "Group projects suck but this one has actually gone very well."

AGR 215 individual student reflections, Spring 2016



Rationale

Through group work, "(1) students learn teamwork skills, (2) students improve their critical thinking skills, and (3) students gain more insight about a particular topic."

Can the benefits outweigh the inherent challenges?

Payne, B.K., E. Monk-Turner, D. Smith, and M. Sumter. 2006. Improving group work: Voices of students. Education 126(3):441-448.



Rationale

Seeks answers to key questions:

– What elements of group work improve students' learning experiences?

– Does structure affect perception?



Methods

- Series of 3 questionnaires
 - Administered in AGR 215 Farm Supply & Food Industry Management
 - ISU Institutional Review Board Protocol #910555-2
 - Before, halfway through, and upon completion of the project
 - Topics included:
 - Prior group project experiences
 - Structural elements of AGR 215 project
 - Attitude toward group projects



Methods

- Summary statistics
- Paired sample t-test
- SPSS Version 22



Results: Prior to beginning the AGR 215 project

Element of group projects	% with prior experience	% who would choose
Receive grades/feedback on project throughout semester	61.1%	66.7%
Professor assigns students to work groups	83.3%	25%
Groups establish their own group norms	83.3%	38.9%

66.6% had completed 3+ prior group projects in college



Results: Upon completion of the AGR 215 project

% who agree or strongly agree with the following:		
Establishing group norms increased cooperation	91.9%	
Professor expectations clearly understood	97%	
Opportunity to resubmit sections contributed to group's success	100%	
Scaffolding contributed to group's success	100%	



Results: Upon completion of the AGR 215 project

Compared to their past group project experiences:		
This project provided more structure	87.9%	
This group worked better together	51.5%	
Their self confidence increased	57.6%	



Results: Upon completion of the AGR 215 project

 Students report a significantly positive increase in their overall opinion of group projects (p<0.001)



Implications

 Results suggest that the way a group project is structured can improve the student learning experience

Can be applied to any discipline





Questions?