

Using ITP Metrics as a Peer Feedback Tool in University-level Agricultural Coursework

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Introduction

- Flipped classrooms are commonplace in higher education and require students to prepare prior to class for complex, engaging activities during course meetings.
 - Preparation could include viewing videos, reading through print materials, etc. (O’Flaherty & Phillips, 2015).
- Peer feedback is a critical component of TBL and is factored into the course grade weights.
- “The students, not the teacher, have the best knowledge of the quantity and quality of each member’s contribution to the work of the group” (Michaelsen et al., 2004, p. 18).
- A peer feedback tool that can be easily used by students is vital to gaining information for the continuous development of individual team members and the whole team.
- TBL is a useful, practical approach within university-level agricultural coursework and is viewed favorably by students (McCubbins, Paulsen, & Anderson, 2016, 2018).

How it Works

- Two agricultural mechanics courses at Southern Arkansas University (SAU) taught using TBL during the Fall 2019 semester.
- Individual and Team Performance (ITP) Metrics selected because it is a free, easy-to-use instrument for both quantitative and qualitative peer feedback (Jamieson & Shaw, 2018).
- Students given one week to provide feedback for each team member and for the whole team during each peer feedback activity.
- All raw data were used to calculate scores for each student.
- ITP Metrics generated specific feedback for each team member and the whole team as two separate PDF documents emailed to students individually for review and discussion if desired.



	A	B	C	D
1	Last Name	First Name	Email	Group
2	August	Alvin	alvin.august@ucalgary.ca	1
3	Barker	Bob	bob.barker@ucalgary.ca	1
4	Chu	Catherine	catherine.chu@ucalgary.ca	B
5	Dime	Dorothy	dorothy.dime@ucalgary.ca	B

Score Matrix		C	Communicating with team members	Adj Factor w/ Self	(Participant Average) / (Group Average) Includes self-ratings. Capped between 0.60 and 1.10.
PEER FEEDBACK AND TEAM DYNAMICS DEMO		S	Strong foundation of knowledge, skills, and abilities		
		W	Commitment to the team’s work	Adj Factor w/o Self	(Participant Average) / (Group Average) Excludes self-ratings. Capped between 0.60 and 1.10.
		E	Emphasizing high standards		
		K	Keeping the team on track		

Name	Group	Rater #	Rater #1					Rater #2					Rater #3					Rater #4					Adj Factor w/ Self	Adj Factor w/o self
			C	S	W	E	K	C	S	W	E	K	C	S	W	E	K	C	S	W	E	K		
Brian Micco	1	1	4	3	4	2	4	4	3	3	5	3	2	2	3	5	4	5	5	4	3	5	1.08	1.10
Bryan Moore	1	2	2	5	4	2	4	3	5	4	2	4	3	3	2	5	4	2	2	2	4	4	0.97	0.96
Rachel Huskey	1	3	5	2	5	3	2	4	3	2	3	3	4	2	5	5	5	5	5	3	2	3	1.05	1.01
Theodora Van	1	4	3	2	4	4	4	2	5	2	2	2	4	5	2	2	2	3	4	2	4	3	0.90	0.90

Implications, Future Plans, Advice, & Costs

- Students typically responded positively and appropriately when providing feedback about their peers and the entire team.
- Instructor did / should actively monitor the peer feedback processes and advise students to maintain professionalism and courtesy when evaluating their peers and whole teams (Michaelsen et al., 2004).
- Average time to complete the mid-semester and end-of-semester peer feedback activities was 20 minutes each.
- ITP Metrics will continue to be used in these two courses and will be expanded into other courses.
- Recommend other course instructors consider adopting this peer feedback tool in their coursework when appropriate, regardless of whether or not a course is taught using TBL.
- ITP Metrics is available free of charge; primary investment was approximately 30 minutes to set up all four peer feedback activities within the courses.

References

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