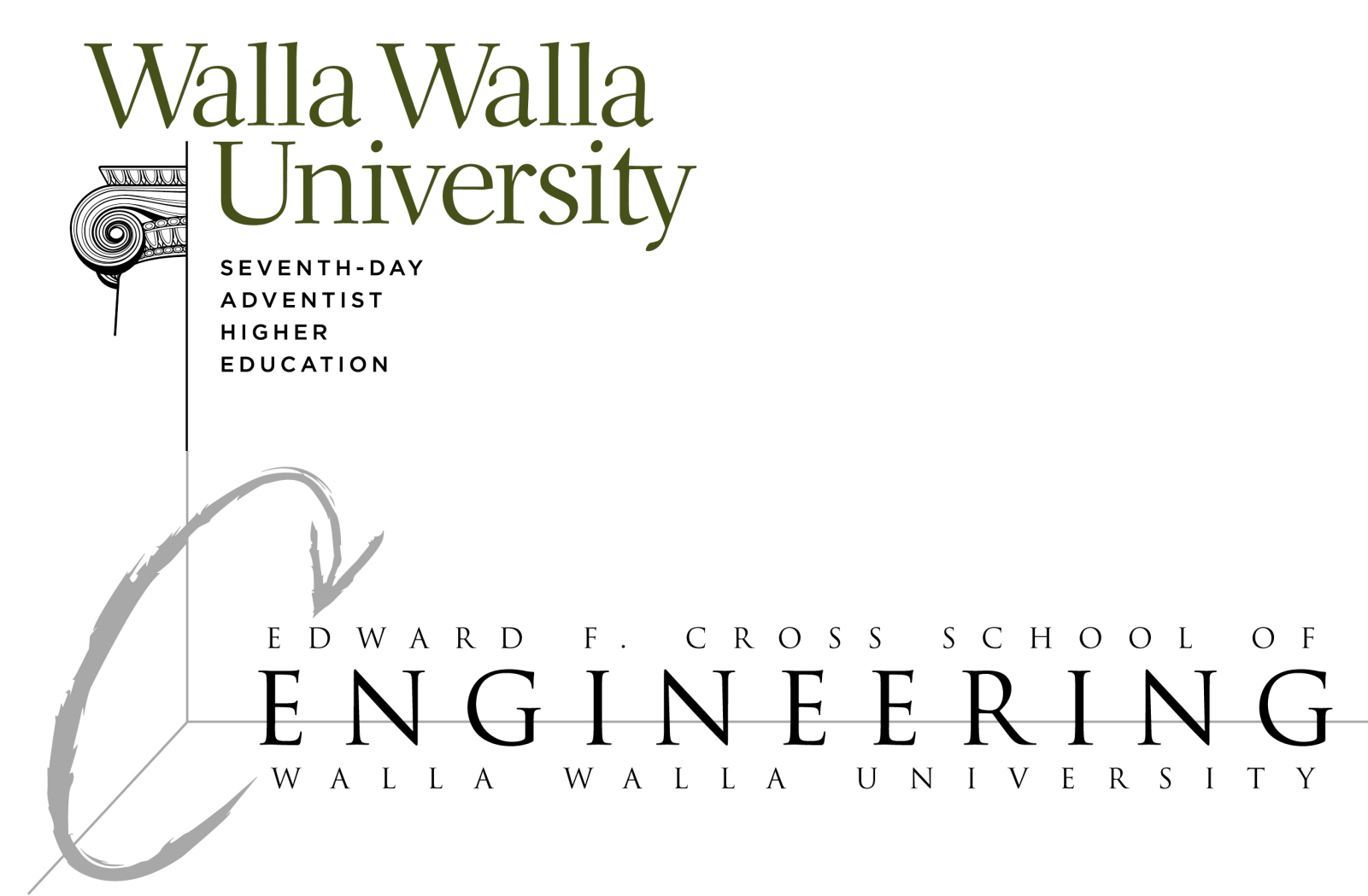


BOARD # 194: Mapping CATME Behaviors to ABET Outcome Five Elements

Prof. Melodie A. R. Williams EdD, Walla Walla University

Melodie Williams is a civil engineering professor at Walla Walla University. A Walla Walla University graduate, she returned to the University in 2009 after 23 years in practice. Her MSCE is from Washington State University. She completed an EdD at the University of North Dakota in 2024. This work was developed as part of her dissertation. <https://orcid.org/0000-0001-8281-796X>



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Melodie A. R. Williams, Edward F. Cross School of Engineering,
Walla Walla University, College Place WA 99324
melodie.williams@wallawalla.edu



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Comprehensive Assessment of Team Member Effectiveness (CATME)

The National Science Foundation (NSF) funded the Comprehensive Assessment of Team Member Effectiveness (CATME) assessment tool for engineering students. Starting in 2003 Matthew Ohland led a team from multiple universities who designed CATME. A Behaviorally Anchored Rating Scale (BARS) of five factors fit the data best. The five behaviors are:

- contributing to work;
- interacting;
- keeping on track;
- expecting quality;
- knowledge, skills, and abilities.

Students rate themselves and their teammates from one (lowest) to five (highest) using a holistic rubric. The average peer ratings is the score. Three is a passing score. CATME also compares a student’s self-assessment with the mean assessments of their teammates. (Loughry et al., 2007; Ohland et al., 2012).

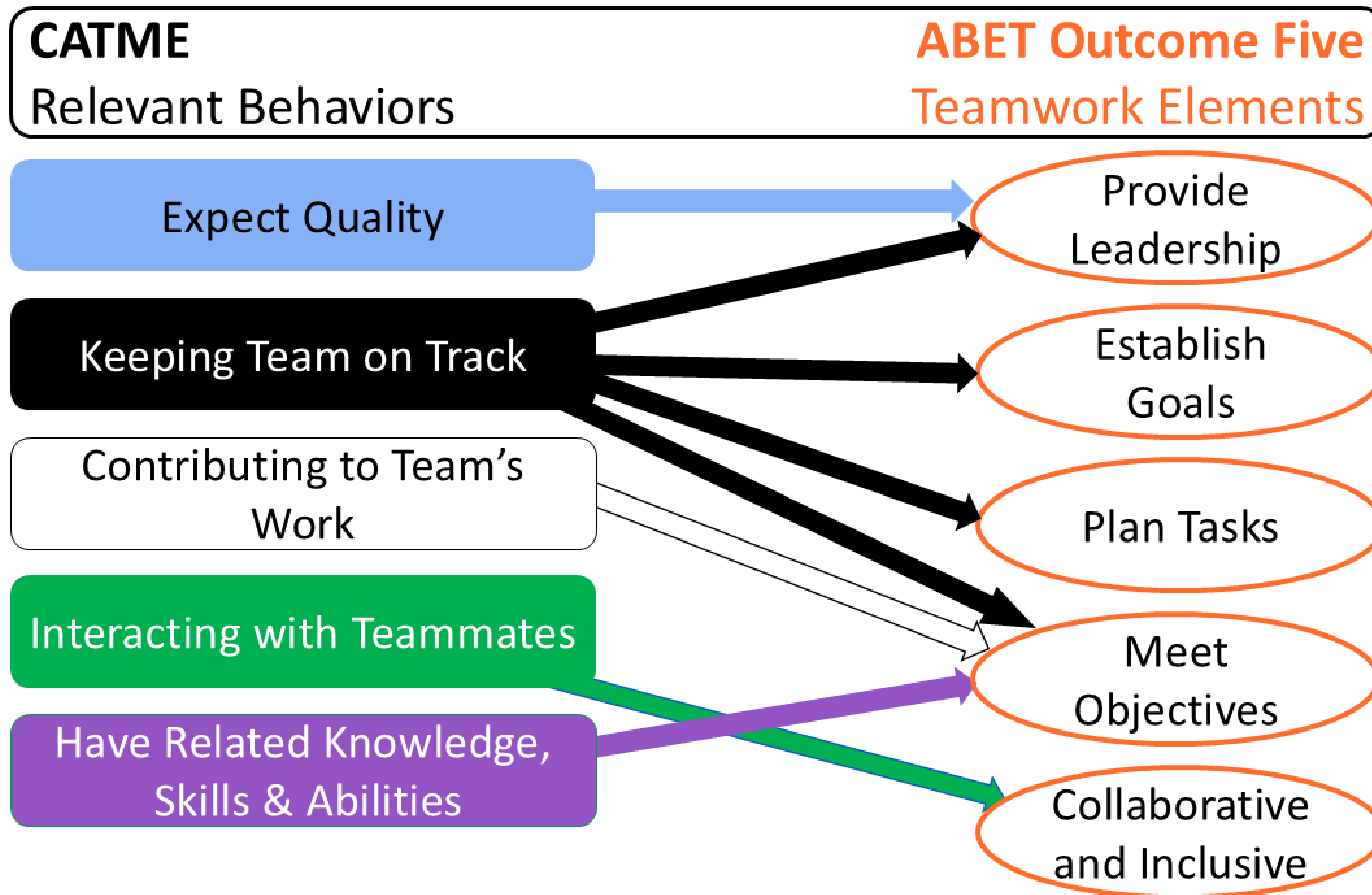
In 2012, a web-based version was published. Since then, Purdue University’s School of Engineering Education established CATME as a non-profit center (School of Engineering Education, 2024a, Ohland et al., 2012).

ABET Teamwork Student Outcomes

The engineering accrediting body, ABET, began using Student Outcomes in 1998, with compliance required beginning in 2001 (Prados et al., 2005). Teamwork, specifically, “an ability to function on multi-disciplinary teams” (Lo, 2000, p. 3) was included. This was the requirement in effect when CATME was developed.

In 2018, revised Student Outcomes changed the teamwork description to “an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives” (ABET Engineering Accreditation Commission, 2018, p. 6). This is the current teamwork student outcome.

Many engineering schools use CATME to assess their students’ teamwork skills for ABET accreditation (e.g. Beigpourian et al., 2019; Brawner et al., 2018; Lucietto & Berry, 2017). This raises the question – how do the ABET teamwork student outcome elements correspond to the CATME behaviors? To answer this question, I developed the crosswalk shown below. Institutions developing assessment programs for ABET Outcome 5 Teamwork can use this crosswalk to show their program is meeting the requirement.



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