

Teamwork and Collaborative Learning

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Definitions

The Foundation Coalition, an NSF funded engineering coalition, defines a team as " a small group of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable."(http://www.foundationcoalition.org/publications/brochures/Teams_One_Page_unified.pdf). This definition is very similar to that offered by Katzenbach and Smith (1993).

Katzenbach, J.R. & Smith, D.K. (1993). *The Wisdom of Teams: Creating the High-performance Organization*. Boston: Harvard Business School.

“Teamwork skills include the mix of interactive, interpersonal, problem solving and communication skills needed by a group of people working on a common task, in complementary roles, towards a common goal whose outcomes are greater than those possible by any one person working independently.”

(http://www.griffith.edu.au/centre/gihe/griffith_graduate/toolkit/teamwork/why.htm)

Types of teamwork

- a. With respect to implementation structure
 - i. Within a specific course on a research project
 - ii. Within a specific discipline, involving students with different academic standing
 - iii. Interdisciplinary – involves students from different majors
- b. With respect to content
 - i. Knowledge based – e.g., problem solving, research project
 - ii. Activity based – e.g., football team, service learning team

“‘Collaborative learning’ is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together” (Smith & MacGregor, <http://learningcommons.evergreen.edu/pdf/collab.pdf>).

Rationale

Teamwork and collaborative learning contribute to learning other skills including

- Communication, effective written and oral skills, presentations
- Critical thinking and problem solving
- Organizational and leadership skills, time management skills
- Cultural awareness, intrapersonal communication skills

According to research conducted on behalf of AAC&U, teamwork is one of the most important skills that employers look for in new hires. Furthermore, employers would like colleges and universities to do more to teach students teamwork

(<http://www.aacu.org/leap/documents/Re8097abcombined.pdf>).

Intellectual and practical skills were identified as one of the areas of strategic interest and were defined by President Byrd as including three elements:

- “The ability to think critically

- The ability to communicate effectively
- *The ability to collaborate and work as a member of a team*” (emphasis added)

(http://www.simpson.edu/plan/committees/action/IPS_finalreport.pdf).

Criteria for Approving Proposals

Source Information on Similar Requirements at other Good Schools

Teaching Resources

PennState has a couple helpful websites that discuss teaching using team. According to one of their sites, “research has shown that team work is valuable for students both on the job market and in learning course material, yet many faculty and students find team projects frustrating and unrewarding. This Web site will show you how to effectively incorporate teamwork into your courses, avoid common pitfalls and turn it into a valuable learning experience for your students.” (<http://tlt.its.psu.edu/suggestions/teams/>). Additional information about teaching teamwork can be found at <http://pbl.ist.psu.edu/teamwork/>.

Griffith University has a Teamwork Toolkit that provides information on what teamwork entails, how to teach it, and how to assess it. Teaching Tips are available at http://www.griffith.edu.au/centre/gihe/griffith_graduate/toolkit/teamwork/teach.htm.

MIT provides information on teaching teamwork at <http://web.mit.edu/tll/teaching-materials/teamwork/index.html>. The materials include a handout for students that provides tips on working in teams and on solving problems that arise when working in groups. Information on assessment is also provided on this webpage.

Assessment Resources

Griffith University provides information on how to assess teamwork at http://www.griffith.edu.au/centre/gihe/griffith_graduate/toolkit/teamwork/assess.htm.

Examples of Classes

Staffing and Costs

Implementation Challenges
