



Teaching Insight: Designing effective collaborative learning experiences

Why collaborative learning? Collaborative learning is an instructional method where students work together to achieve a shared goal, usually in the form of a project (Gokhale, 1995). At university, group assessments and activities that teach and encourage teamwork are considered forms of collaborative learning. There is high employer demand for university graduates with the ability to collaborate (Hansen, 2006). Students find collaborative learning helps develop their critical thinking and problem-solving skills, and increase their preparedness for assessments. They also appreciate diverse personalities and learning styles as elements of successful team work (Frame et al., 2015).

A summary of strategies shown to be effective in designing and supporting collaborative learning is presented below.

SETTING UP TEAMS

Allocating students into groups for assignments is not the same as developing collaborative teams. Consider these insights when initiating teamwork in your unit:

- Teacher-assigned or student-assigned groups? Student-assigned groups promote higher levels of intrinsic motivation, classroom community, enthusiasm to work collaboratively, greater confidence in their team members' abilities and efficient conflict resolution. However, teacher-assigned groups have proven to be more task-oriented and efficient in accomplishing group goals, with lesser degrees of conflict compared to student-assigned groups (Chapman, Meuter, Toy, & Wright, 2006; Ciani, Summers, Easter, & Sheldon, 2008).
- Groups of four students is optimal in generating diverse and creative ideas. Students are more likely to perceive their peers' participation as higher when in a smaller group (Burke, 2011; Kooloos et al., 2011).

BUILDING TEAMS

Team building activities are helpful in developing trust within collaborative learning settings. This exercise by Ahuja, Srivastava and Padhy (2017) incorporates activities around Tuckman's four stages of team building:

- *Forming*: students create a team name and a 'war cry' to develop a collective identity.
- *Storming*: students compete within and across teams in a fun activity (e.g. a short quiz, card game) so they begin to feel a sense of belonging to their team.
- *Norming*: Each team is stranded on an island and must discuss and agree to their top 5 items to survive. Watch for processes teams use to come up with their list.
- *Performing*: Team members work together to design and create a costume for a team member from various materials (e.g. toilet paper, foil, fabric). After the activity, ask students to reflect on their strategy, difficulties they anticipated and planned for, and what worked well.

SUPPORTING TEAMS

It is one thing to design and build a team, but it's another thing to strengthen teamwork skills for when students are exposed to new challenges over the semester. You may like to implement these strategies in your classroom:

- Scaffold collaborative learning across the semester. In week 1, get students to form groups, perform icebreaker activities and establish a team contract (Shaw et al., 2015).
- Embed group work and group learning activities within weekly course content to strengthen students' collaborative skills and to help them retain course content (Shaw et al., 2015).
- Provide time in class for teams to work on their tasks. You can facilitate meetings and provide support where necessary, whilst also encouraging group members' accountability over their tasks and meeting deadlines (Page & Donelan, 2003).



- Acknowledge that each student approaches your class from their own perspective, past experiences and aspirations. Ask students to reflect on their strengths, their areas for improvement, and what they want to achieve in your class. Design collaborative tasks to match their current knowledge and skill level (Fry, Ketteridge & Marshall, 2009).

MANAGING AND LEVERAGING CONFLICT

Conflict is often framed as disruptive, and a contributor to negative group experiences. Conflict, however, can be functional. Here are some strategies to manage or leverage conflict, depending on the situation:

- Developing a team charter is useful in reducing dysfunctional conflict. This outlines agreed-to-rules to guide collaboration and decision-making. Teams should consider complex issues that could arise in their groups, so they can develop guidelines to address these possible conflicts if they emerge (Byrd & Luthy, 2010). Review this document overtime to ensure teams can be flexible to changes (Page & Donelan, 2003).
- Teach students about productive conflict, not just how to resolve it. Sometimes, conflicts over tasks can stimulate creativity and innovation. For example, ‘controversy training’ can encourage students to promote and explore diverse viewpoints in a psychologically safe and positive environment (O’Neill et al., 2017).

ASSIGNING GROUP ROLES AND RESPONSIBILITIES

Personalities can affect social and task cohesion, and overall group performance (van Vianen & De Dreu, 2001). To reduce personality clashes and the incidence of social loafing, you might like to consider the following:

- Employ a ‘role-assignment’ exercise so students can assume clear roles and reduce social loafing or duplication of tasks. Possible roles include: leader, timekeeper, gatekeeper, social-emotional leader, project coordinator, researcher and writer (Page & Donelan, 2003).
- After students have worked in their assigned roles for a while, get them to switch their roles with other team members. Doing this will encourage social loafers to participate, help students understand and adapt to their team members’ different working styles, and recognise how each role has an important contribution to the team (Page & Donelan, 2003).

FOSTERING MULTICULTURAL GROUP WORK

Multicultural learning fosters and enhances intercultural communication skills, challenges cultural stereotypes and prepares students to work in international climates (Medved et al., 2013). Read these tips on supporting intercultural learning and diversity:

- Encourage students to identify and discuss their similarities in terms of common interests, attitudes, values and behaviours as this helps create a sense of belonging (Medved et al., 2013).
- Create environments of ‘productive cultural diversity’ - students could elect a ‘facilitator’ in their group to assure every member feels safe to express their opinions and views and allow for all voices to be heard (Medved et al., 2013).

PROVIDING ‘REAL-WORLD’ EXPERIENCE

When students work on tasks relevant to real-world situations they are more likely to hold more positive attitudes towards team work and team effectiveness (Hansen, 2006). Here are some examples of authentic tasks you can adapt for your students:

- Design ‘half-way house’ activities where students collaborate to complete a task on behalf of a real client (Sachs, Rowe & Wilson, 2016). Invite the client to deliver the project brief to students so they can see how their work is relevant to real-life business problems (Patrick & Fletcher, 2008)

- Simulate the workplace environment in the classroom. RMIT University has transformed the classroom into a financial trading floor with three in-class games to introduce finance students to the concepts, jargon and mechanics of professional finance, supported by online financial market simulation games (Sachs, Rowe & Wilson, 2016).

REFERENCES

- Ahuja, K. K., Srivastava, G., & Padhy, P. (2017). Do team building training interventions work? Evaluation using Kirkpatrick's model in a college setting. *International Journal of Education & Management*, 7(4), 450-455.
- Burke, A. (2011). Group work: How to use groups effectively. *Journal of Effective Teaching*, 11(2), 87-95.
- Byrd, J., & Luthy, T. (2010). Improving group dynamics: Creating a team charter. *Academy of Educational Leadership Journal*, 14(1), 13-26.
- Chapman, K., Meuter, M., Toy, D., & Wright, L. (2006). Can't we pick our own groups? The influence of group selection method on group dynamics and outcomes. *Journal of Management Education*, 30, 557-569. DOI: 10.1177/1052562905284872
- Ciani, K. D., Summers, J. J., Easter, M. A., & Sheldon, K. M. (2008). Collaborative learning and positive experiences: Does letting students choose their own groups matter? *Educational Psychology*, 28(6), 627-641. DOI: 10.1080/01443410802084792
- Frame, T. R., Cailor, S. M., Gryka, R. J., Chen, A. M., Kiersma, M. E., & Sheppard, L. (2015). Student perceptions of team-based learning vs traditional lecture-based Learning. *American Journal of Pharmaceutical Education*, 79(4), 51-51. DOI:10.5688/ajpe79451
- Fry, H., Ketteridge, S., & Marshall, S. (2009). *A handbook for teaching and learning in higher education. Enhancing academic practice* (3rd ed.). New York, NY: Routledge.
- Gokhale, A. A. (1995). Collaborative learning enhances critical thinking. *Journal of Technology Education*, 7, 22-30.
- Hansen, R. S. (2006). Benefits and problems with student teams: Suggestions for improving team projects. *Journal of Education for Business*, 82(1), 11-19. DOI: 10.3200/JOEB.82.1.11-19
- Kooloos, J., Klaassen, T., Vereijken, M., Van Kuppeveld, S., Bolhuis, S., & Vorstenbosch, M. (2011). Collaborative group work: Effects of group size and assignment structure on learning gain, student satisfaction and perceived participation. *Medical Teacher*, 33(12), 983-988. DOI: 10.3109/0142159X.2011.588733.
- Medved, D., Franco, A., Gao, X., & Yang, F. (2013). *Challenges in teaching international students: group separation, language barriers and culture differences*. Genombrottet, Lunds tekniska högskola.
- O'Neill, T. A., McLarnon, M. J. W., Woodley, H. J., Eggermont, M., Rosehart, W., & Brennan (2017). Constructive controversy and reflexivity training promotes effective conflict profiles and team functioning in student learning teams. *Academy of Management Learning & Education*, 16(2), 257-276. DOI: 10.1016/j.hrmr.2017.06.002.
- Page, D., & Donelan, J. G. (2003). Team-building tools for students. *Journal of Education for Business*, 78(3), 125-128. DOI: 10.1080/08832320309599708 **
- Patrick, C.-J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [work intergrated learning] report: A national scoping study*. Australian Learning and Teaching Council (ALTC) Final report. Brisbane, QLD: Queensland University of Technology.
- Pfaff, E., & Huddleston, P. (2003). Does it matter if I hate teamwork? What impacts student attitudes toward teamwork. *Journal of Marketing Education*, 25(1), 37-45. doi:10.1177/0273475302250571
- Sachs, J., Rowe, A., & Wilson. (2016). *Work integrated learning (WIL) good practice case studies*. Sydney, Australia: Macquarie University.
- Shaw, J., Mitchell, C., & Del Fabbro, L. D. (2015). Group work: Facilitating the learning of international and domestic undergraduate nursing students. *Education for Health*, 28(2), 124-129. DOI: 10.4103/1357-6283.170123.
- van Vianen, A. E. M., & De Dreu, C. K. W. (2001). Personality in teams: Its relationship to social cohesion, task cohesion, and team performance. *European Journal of Work and Organizational Psychology*, 10(2), 97-120. DOI:10.1080/13594320143000573

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