

## Teaching Connections Podcast

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**Episode** 17

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**Title:** Should We Encourage Diversity of Opinions in Group Work?

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Group work is often an unhappy experience for students. How can educators better manage the process to produce better learning outcomes? In this podcast, Dr Ian Z.W. Chan (a Lecturer at the Dept of Biological Sciences, Faculty of Science) describes a simple change to the group formation process which enhanced communication-centric learning outcomes in his classroom.

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## 0 **Intro Voiceover**

“You are listening to the Teaching Connections Podcast, brought to you by the Centre for Teaching, Learning, and Technology, CTLT, National University of Singapore. Teaching Connections is an online teaching and learning space that aims to advance discussions and share effective practices and ideas related to higher education.”

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## 1 **Intro (00:24):**

**CTLT:** In this podcast, we are pleased to have Dr Ian Chan, a lecturer from the Faculty of Science, share his teaching and learning experience.

Group work is often an unhappy experience for students. How can educators better manage the process to produce better learning outcomes? In this episode, Ian describes a simple change to the group formation process which enhanced communication-centric learning outcomes in his classroom.

### **Podcast Script**

#### **(00:54)**

Michelle (not her real name) was angry. She had approached me before this morning’s lecture to ask for a meeting, and now we sat down to talk.

*“He didn’t do a single task he was assigned—even after we reminded him many times and helped him to do some of the research! He doesn’t deserve the same grade as us!”*

#### **(01:17)**

In many educational settings, from secondary schools to tertiary institutions, there is often a love-hate relationship surrounding group work—educators love it and students hate it!

In Michelle’s exasperated words: *“Why do I have to tank for my teammate who doesn’t contribute anything?!”*

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**(01:39)**

“Tank” is a Gen-Z, gaming slang word meaning to bear the brunt of something—in this case the group’s workload. Unhappiness with workload distribution in teams is common, and highly detrimental to team morale and student learning (Aggarwal & O’Brien, 2008). Yet research tells us that collaborative learning brings many benefits to students—social, psychological and academic (Panitz, 1996; Laal & Ghodsi, 2012). In the next three minutes, I’d like to share about a time when I tried to bring the dystopian reality of frustrated students in my classroom (such as Michelle above) a little closer to the utopian dream we read about.

**(02:18)**

In my first semester as a lecturer, I lovingly crafted a group project—grounded in pedagogical principle and built on the wisdom of past experience. The project would elegantly synthesise all the learning outcomes in my course, leave my students with a fun yet profound classroom experience, and inspire them to continue learning beyond my classroom. Or so I thought. In that class, I saw firsthand how much unhappiness group assignments can cause.

**(02:51)**

*“I hate the group project!”* Michelle had said with such intensity that I was momentarily concerned for my physical safety. This made me ask myself: why does collaborative learning in practice often turn out so different from what theory tells us it can, and should, be?

**(03:12)**

As educators, we have significant influence over how group work is done in our classroom—from the nature of the final assessment to how teams are formed at the very start—and I wondered how I could use this influence to create better learning outcomes for my students. Specifically, would it be better to have groups of students who largely agree with one another or should I mix together students who disagree on topics that are fundamental to how they would tackle their project?

**(03:45)**

On one hand, disagreements might produce more eager engagement (Stromer-Galley & Muhlberger, 2009), thereby helping students better achieve my learning outcomes. On the other hand, disagreements may devolve into acrimonious and counterproductive conflict (Jehn et al., 1997). And so, it was with much trepidation that I tried something new in my 4<sup>th</sup>-year course on Tropical Conservation Biology.

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**(04:09)**

In this course, there is a semester-long group project where students suggest solutions to complex conservation problems. Happily for me, there is bitter debate on the “correct” approach to conservation solutions, even in the literature—with different camps advocating different views, often quite vehemently. Using a published questionnaire (Sandbrook et al., 2019), I first determined which camp each of my students most strongly aligned with. I then ensured that each group consisted of students from these different camps. I tracked the students’ performance throughout the semester, and compared them to the previous batch of students who had been allowed to form less diverse groups.

**(04:53)**

In the end, I found that the students this year—working in groups with more diverse opinions—performed better. But this was observed in only one learning outcome—related to better communication. Specifically, they were eventually better at formulating and discussing informed opinions on complex issues constructively and amicably. In all other content-based learning outcomes, the two batches performed similarly.

**(05:24)**

It is interesting that better communication within the groups did not automatically lead to better performance in the other learning outcomes. Informal student interviews suggested that, while it was good to have diverse groups, more time, space and structure were needed to allow the students to extract the meaning from the deeper conversations they were having.

In addition, when I asked Michelle—my unhappy student from earlier—whether she had benefitted from the project, she said: *“Yes, I learnt quite a lot. But if I could have worked with my friends, I would have enjoyed it so much more!”*

**(06:04)**

She reminded me that collaborative learning is, after all, a social process and that freedom of choice goes a long way to keeping people happy (Abdur Rahman & Veenhoven, 2018).

**(06:17)**

So the next time I run this course, I will likely give students a measure of freedom—to choose their own groupmates, so long as they have a differing opinion. To this, I will add more structure to help my students better benefit from the deeper conversations that the diversity of opinion will promote in their groups.

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To all my students, represented by Michelle, who have shared their groupwork-related grievances with me—thank you for sharing your experiences; they will benefit generations of students to come.

Till next time, this is Ian Chan signing off.

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### **Outro Voiceover (06:53)**

“Thank you for tuning in to the CTLT podcast.”

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### **References**

- Abdur Rahman, A., & Veenhoven, R. (2018). Freedom and happiness in nations: A research synthesis. *Applied Research in Quality of Life*, 13(2), 435-456. <https://doi.org/10.1007/s11482-017-9543-6>
- Aggarwal, P., & O'Brien, C. L. (2008). Social loafing on group projects: Structural antecedents and effect on student satisfaction. *Journal of Marketing Education*, 30(3), 255-264. <https://doi.org/10.1177/0273475308322283>
- Jehn, K. A., Chadwick, C., & Thatcher, S. M. (1997). To agree or not to agree: The effects of value congruence, individual demographic dissimilarity, and conflict on workgroup outcomes. *International Journal of Conflict Management*, 8(4), 287-305.
- Laal, M., & Ghodsi, S. M. (2012). Benefits of collaborative learning. *Procedia-social and Behavioral Sciences*, 31, 486-490. <https://doi.org/10.1016/j.sbspro.2011.12.091>
- Panitz, T. (1999). Benefits of cooperative learning in relation to student motivation. In M. Theall (Ed.), *Motivation from within: Approaches for encouraging faculty and students to excel, New directions for teaching and learning*. Jusey-Bass Publishing.
- Sandbrook, C., Fisher, J. A., Holmes, G., Luque-Lora, R., & Keane, A. (2019). The global conservation movement is diverse but not divided. *Nature Sustainability*, 2(4), 316-323. <https://doi.org/10.1038/s41893-019-0267-5>
- Stromer-Galley, J., & Muhlberger, P. (2009). Agreement and disagreement in group deliberation: Effects on deliberation satisfaction, future engagement, and decision legitimacy. *Political Communication*, 26(2), 173-192. <https://doi.org/10.1080/10584600902850775>