**LEGO BLOCKS – A FOUNDATION FOR EFFECTIVE GROUP WORK**

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**Introduction**

In addition to being technically competent in their chosen discipline, employers expect graduates to have well-developed problem solving, communication and teamwork skills (Karzunia, West, De Costa, Philippou & Gordon, 2019). To address these needs business schools make extensive use of experiential learning projects to develop soft skills in students (Laufer, Jester & McKeen, 2018; Brutus & Donia, 2010). These projects often take place in group settings, either unintentionally due to class size constraints, or with the specific aim of developing students’ teamwork and collaborative abilities (Betts & Healy, 2015). However, the use of group work raises several challenges, both for the instructor and the students, around how to select group members, develop group cohesion, manage social loafing, and assess individual student contributions (Maiden & Perry, 2011). Instructors often seek to address these challenges through changes to the design of the group work activity itself, or through intervening to resolve group conflict. Less attention is paid to preparing students for the challenges that they might encounter with a group work. This session will present a learning activity designed to get students to reflect on pitfalls commonly associated with group work in experiential learning projects.

**Theoretical foundation**

Group development in organisational settings is well-understood and there are several theoretical frameworks that explain the stages that groups progress through in becoming productive (Tuckman & Jensen, 1977; Gersick, 1988; Wheelan, 2005; Rafferty, 2013). The most widely recognised of these frameworks is Tuckman and Jensen’s group development model, with its five stages of forming, storming, norming, performing and adjourning. Students engaged in group learning projects need to transition through similar stages in order to reach productive learning and assessment outcomes (Lee, Smith & Sergueeva, 2016), but are often left to their own devices to navigate this journey, with little priming or preparation for the challenges that come with group work. Lee et al. (2016) note that in the early stages of group development, where the focus is on inclusion, students are likely to experience significant of anxiety and uncertainty and thus demonstrate higher levels of tentativeness, defensiveness and dependence on the group leader or instructor.

During the storming and norming stages there is likely to be conflict regarding power, leadership, role clarity and individual contribution as students seek to clarify their role in the group and agree on approaches to carrying out the project. It is important for instructors to be proactive in supporting students during these initials stages of group development, as groups that fail to move beyond the storming phase are at greater risk of poor group outcomes. Lee et al. (2016) suggest that allowing students some discretion in the selection of group members and getting students to sign a team contract can help address challenges in group formation.

While such approaches go some way to clarify expectations and hold individuals to account, they do not address many of the pitfalls that I have observed over ten years of running a large experiential learning project. These include (1) the tension between students’ preferences for self-directed learning and their need for clarity around assessment expectations; (2) a lack of ability to resolve challenges around group leadership; (3) a lack of collaborative and interdependent effort and issues associated with sequential work; (4) a worrying trend towards working in ‘digital isolation’ and students’ preference for communicating digitally.

To assist undergraduate students in preparing for the challenges associated with group work, I purposefully adapted the “Under Construction” job design exercise (Donovan & Fluegge-Woolf, 2014), which I run in the very first class of a large 300-level Learning and Development paper. My goal with this activity to get students to experience and reflect upon the anxiety, uncertainty and conflict inherent in group learning projects in a simulated and safe environment, prior to them experiencing for real. In reflecting on the activity students are encouraged to think about solutions and how they can implement these in their own group context.

**Learning objectives**

By attending this session participants will acquire the knowledge and skills necessary to run the “Building strong group foundations” activity for undergraduate courses involving experiential group learning projects. Participants will also have the opportunity to discuss how they might adapt the activity to fit their unique course contexts.

**Exercise overview**

Working in groups of 4 – 5 students are given the task of building a basic LEGO set in a limited amount of time. Each group is given a separate LEGO set to build. While the overall aim is the same for each group, i.e. build the LEGO set, the instructions for the activity are different for each group. This is done to simulate the ways in which students often approach group projects and the challenges they are likely to encounter. Prior to the activity commencing each group is given two minutes to select a leader. The leaders are then asked to come forward and collect their group’s LEGO set and instructions. The leader reads the instructions to the groups. Once all groups are clear on the instructions the timer is started and they can commence building the LEGO sets. Due to space constraints the full instructions are not provided here but will be discussed during the conference session, however, the following broad manipulations are included in the different sets of instructions leaders receive:

(1) *The highly structured group.* The group is provided with the LEGO set instructions and told to follow these very closely. Each student is given a very specific role to perform and may only perform that role. The leader is also instructed to be very autocratic and rules based. This manipulation simulates how students often stymie their own creativity by focusing too heavily on assignment instructions, assessment expectations, and group roles. It also simulates how students often divide group tasks and work independently rather than collaboratively.

(2) *The highly unstructured*. The group is not provided with the LEGO set instructions and are only allowed to briefly view a picture of the completed set. The students are free to self-determine how they go about building the LEGO set. This manipulation simulates the uncertainty that students often encounter at the start of group learning projects where roles and outcomes are unclear or ambiguous. The manipulation also seeks to simulate leaderless groups.

(3) *The sequential group*. The group is provided with the LEGO set instructions but must work in a sequential manner with each student allotted two minutes building time each. This manipulation simulates how students often divide work amongst the group, work independently for the majority of the project and then try and force the individual parts of the project or assessment together in a rush just prior to submission.

(4) *The digital isolated*. The group leader is provided with the LEGO set instructions and asked to leave the room. All students in the group are only permitted to communicate with one another via digital means, for example text messaging, Facebook messenger or WeChat. The group leader may only communicate the LEGO instructions digitally. This manipulation simulates the growing tendency of student to create online groups on social media and then attempt to coordinate group meetings and activities almost exclusively via digital communication while working independently instead of collaboratively.

(5) *The procrastination group*. The group is provided with the LEGO set instructions and is free to self-determine how that go about the task. However, the group is instructed that they cannot commence building until half of the time has elapsed. The group members are encouraged to spend the first half of the activity checking their social media accounts, chatting and having fun. This manipulation simulates the tendency for students to procrastinate and then cram things in closer to the submission date. It also simulates anxiety and frustration that group members experience when not everyone in the group is committed to the same deadline.

(6) *The empowered group*. This manipulation attempts to simulate the preferred group work setting in which students have clear expectations and instructions for achieving the intended learning outcomes, but are free to self-determine how they go about the task. In this approach the leader is provided with the LEGO set instructions and the group is given a few minutes at the start to determine roles and an approach to the task.

In addition to the above, I also make use of several other manipulations to simulate social loafing, group conflict, group member exit and other common challenges with group learning projects. These additional manipulations will be presented during the activity with conference participants and are not discussed here.

At the conclusion of the LEGO building exercise the student are asked to reflect on how the various manipulations are similar to past experiences with group but, and also what strategies they could use to overcome these challenges in the project that lies ahead of them.

**Session description**

The session will last for 60 minutes. During the session I will run the activity in exactly the same way as I would with an undergraduate audience, however, I will use the reflective time at the end for discussion on how the exercise might be adapted and improved for group work projects in other discipline areas or addressing different group work challenges.

* I will commence the session with a 10 minute overview of the course setting in which I use the activity and my rationale for introducing it. This will cover the common challenges that I have experienced over the past ten years with group work.
* Participants will then be divided into groups of 4 – 5 depending on the audience size, this should take approximately 5 minutes for the groups to organise themselves and select a leader.
* LEGO sets and instructions will be handed out and leaders will have five minutes to discuss these with the group.
* The activity will then run for 15 – 20 minutes. The remaining 20 – 25 minutes will be used for reflection and discussion on how the exercise might be adapted to different context and improved for future implementation.
* All participants will be provided with the full set of instructions for running the exercise, as well as the additional manipulations used during the activity. LEGO sets will be provided during the activity but these will need to be returned.

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