

Increasing Students' Felt Need for Teamwork: An Experiential Learning Exercise that Sets the Stage

Avan Jassawalla¹, Hemmant Sashittal², Alan Witt³

¹School of Business, State University of New York (SUNY) at Geneseo, USA, ²School of Business, St. John Fisher College, USA, ³Research Instruction Librarian, SUNY Geneseo, USA.

Abstract

This paper describes an innovative learning exercise used in three management classes and inspired by the popular group experience-based game of "escape rooms." Within one 75-minute period, the exercise engaged students and increased their awareness of and motivation for effective teamwork. Our qualitative analysis of the reflection reports students individually wrote immediately after the lesson, shows that the exercise was successful in increasing their knowledge of effective teamwork, creating the felt need for proactively planning their team process, creating the desire to develop more of their own teamwork skills, and arriving at the undeniable realization that working as a team is better than working individually on complex tasks. This exercise adds to the instructor interventions needed in college classes when professors assign term-long team projects with the goal of helping students develop their teamwork skills and be better prepared for the workplace.

Keywords: *Team building; team effectiveness; classroom teams; collaboration; experiential learning; higher education.*

1. Introduction

The importance of teamwork skills in today's organizations is well accepted (Gresch et al, 2020). As businesses deal with increasing complexity due to globalization, the rapid pace of technological change, and intense competition, they look to hire and retain employees who can effectively collaborate with others in teams to produce creative outcomes, complex decision-making, and problem-solving (Gresch et al, 2020; Saghafian and O' Neill, 2018). Therefore, organizations often seek to hire and retain college graduates with not just technical skills but also soft skills such as communication, conflict management, and teamwork (Halfhill & Nielson, 2007; Schartel Dunn et al, 2021). In preparation, many college professors, particularly in business schools, place students in small groups, assign them a semester or term-long team project, and expect that, through first-hand experience, students will acquire the wisdom and skills required to be productive members of work teams (Hunsaker *et al.*, 2011). However, scholars have found that college professors need to do more than simply assigning students to team projects (Schartel Dunn et al, 2021). Leaving students to decipher the ins and outs of effective teamwork without instructor intervention often leads to confusion, frustration, and deep cynicism about teamwork itself.

The literature offers advice on how and when professors should conduct team building, in particular: (a) requiring student teams to construct a team charter or contract that generates discussion, makes explicit members' expectations on team goals, how progress will be measured, rules of conduct and engagement, and how members will hold each other accountable – thus helping to navigate the often confusing forming stage of team development (Hiller and Dunn-Jensen, 2012; Hunsaker *et al.*, 2011); (b) implementing a detailed, consequential (substantially impacting each student's grade) peer evaluation system that includes multiple specific criteria communicated up front and utilized by students who must complete a formative mid-project as well as summative end of semester evaluation (Jassawalla & Sashittal, 2017).

Despite offering instructors advice on multiple team building activities, the literature reflects that the challenge of helping students learn teamwork skills continues (Schartel Dunn et al, 2021). While utilizing team building early in the semester by assigning student teams the task of creating a team charter is a sound suggestion, it is based on the assumption that students can meaningfully discuss their expectations in a vacuum. Scholars who have provided guidelines for the team charter activity, often ask students to reflect on experiences and problems encountered in previous teams (Hillier & Dunn-Jensen, 2012). One flaw is that the team charter is built on expectations from other, previous teams rather than the specific team for which the charter is being written. We therefore propose a new learning activity that will fill this gap.

2. An Innovative Experiential Learning Exercise to Set the Stage

This paper introduces an instructor-guided learning exercise that, we contend, provides a stronger basis for team building than previous advice because it (a) provides students authentic initial experience working with their assigned team as a basis for discussing expectations and next steps, and (b) shapes students' initial attitude towards teams and the team process. This could lead students to more enthusiastically undertake the steps prescribed in the literature and introduced by their instructor such as the team charter and formative and summative peer evaluations. Scholars have hinted at this, indicating that before undertaking team building activities the professor should prepare students and create positive attitudes that increase their motivation for developing effective teamwork (Bryant and Albring, 2006). Additionally, active and experiential or experience-based learning are widely seen as the best ways to help students acquire new attitudes and soft-skills (Conklin & Boulamatsi, 2020; Kolb & Kolb, 2005). However, the literature provides scant evidence of such immersive experiential exercises designed and implemented in ways that trigger positive attitudes and complex learning up front. Therefore, we describe an innovative classroom activity we implemented for this purpose.

The exercise was designed by a co-author in collaboration with fellow librarians. It was inspired by *Escape Rooms* that are a popular leisure activity among students along with their friends and families. The escape room game combines the challenges of working with a group and solving a series of puzzles together by interpreting clues. Another co-author who teaches business management courses, after hearing about the exercise, had the idea to use it as a prelude to team building activities for their classes in which they utilize both the team charter and a consequential peer evaluation system. Many games involve problem-solving and teamwork, but the escape room game was appealing because (a) it includes more than one puzzle or problem to solve at once, incentivizing cooperation and teamwork, and the puzzles escalate in level of difficulty and creativity needed, (b) the combination of escalating difficulty and competition with other teams in the class simulates the challenge of changing strategies and actions as the task gets more difficult, and (c) it efficiently provides students with first-hand experience and data that shape their attitudes towards teamwork and raise awareness of new skills and actions needed.

Together, the co-authors designed follow-up reflection questions that students would individually answer at the end based on their experience in the escape room exercise. The learning objectives were to provide initial experience with teamwork that enables students to: 1.) identify key components of effective teamwork, 2.) explain individual and group actions that should and should not be used to achieve successful group outcomes, and 3.) recognize whether team or individual work is better for complex tasks and projects.

This exercise was conducted in the third week of a 16-week term in three management classes taught by the co-author at an AACSB-accredited business school in Northeast USA – two undergraduate classes in Organizational Behavior (required course for students pursuing their Bachelor's degree); and one graduate class in Leadership in Organizations (elective class for Master's program). Students, between 20-25 years of age, were assigned to teams of 3 to 5 members. There were 14 teams (5 in two of the classes and 4 in the third class), and a total of 49 students participated in the exercise with each student submitting their report of reflections and learning. Only one team from each class successfully completed all the puzzles and “escaped” within the allotted time. While teamwork is a topic of discussion in these classes, this exercise was conducted before any lecture, reading, or discussion on the topic had taken place. Students answered the follow-up questions reflecting purely on their experience during this exercise.

3. The Escape Room Exercise: Implementation Guidelines

The in-depth documentation for this exercise, which includes more detail about each puzzle and how it fits into the whole, can be found at <https://bit.ly/InternOpDB>.

3.1. Physical Setting

The exercise requires a classroom with seating around tables large enough to accommodate up to 6 students (less if the class is small), a student body with their own laptops (or sufficient laptops to provide at least one per group), and a whiteboard.

3.2. Preparations

The instructor should prepare one manila folder for each group of students, containing the two elements of the Gantt chart puzzle (the Gantt chart and the transparency with lines and circles) as well as the Critical path puzzle. These can be pre-placed or handed out during the explanation of the exercise. On the whiteboard, write the following hints: “Things to keep in mind: 1.) Bit.ly links are CASE SeNsItIvE, so type them in exactly as you see them. 2.) Read the instructions on everything you find. 3.) Every website involved with the challenge will be obviously connected to it. 4.) Some googling may be required for solving some puzzles.”

Write down the link for the students to get to the starting document either as a handout or on the board: <http://bit.ly/InternOpSafeT>. Conceal it until the start of the exercise.

3.3. Initial Instructions

Start the experience by reading and performing the predetermined script to set up the framework for the scenario. The framework was as follows: a surveillance technology company with a long-standing relationship with the fictional McConie School of Business

(of which the students are told they are now members) created a competition as a non-standard interview process for a series of paid internships. The first team to complete the challenge within the time limit (45 minutes) will be guaranteed consideration for those paid positions, pending background checks. A secondary (also fictional) prize of non-paid internships is awarded to groups that complete the puzzle after the first group and within the time limit. Once the scenario is introduced, reveal the link and tell students to start.

3.4. Running the exercise

Apart from the basic conceptual hints posted on the board, do not provide active assistance or hints. The instructor's role during the 45 minutes is to monitor the groups and take notes on their group dynamic. Apart from that, there should be no interaction with students apart from referring them to the whiteboard when they have questions.

On the student side of things, the experience consists of two stages designed so that a group of up to 6 people can productively engage with it simultaneously. This is achieved using interlocking puzzle features that force participants to communicate to solve each other's puzzles. The first stage includes two tracks of puzzles; a physical set of puzzles in the folder and an online form with multiple links leading to web pages with clues and a password-locked google form. The physical puzzle unlocks one half of the stage 2 puzzles, and unlocking the google form leads to the other half. The second stage comprises the two forms unlocked by the physical and online challenges, which work together as the final challenge. Once all of the puzzles are successfully unlocked, the group gains access to a google form that records the time stamp to win the experience.

3.5. Discussion following the exercise

At the end of the 45 minutes, instruct students to take 10 minutes and individually note their responses to the following questions based on the Escape Room exercise – each students' reflection report must be submitted at the end of class for participation points:

1. What puzzles did your group complete quickly? Identify and briefly explain at least 2 ways in which your group dynamics (how your team communicated/shared information, connected/worked together, provided leadership) helped with that progress?
2. What puzzles did your group have trouble with? Identify and briefly explain at least 2 ways in which your group dynamics hurt progress?
3. If you were able to do this group activity again, what would you do differently to improve your group dynamics? Note (a) at least 1 action you would take individually and (b) at least one action/improvement you would recommend to the group overall?
4. How did this team activity work compare to if you had to solve all the puzzles on your own/individually?

The last 10 to 15 minutes are used for class discussion during which the instructor asks students for their response to each question, probes for clarity and examples, notes key points on the whiteboard, and summarizes the key conclusions.

4. Students' Reactions and Learning

A qualitative analysis of students' written reflections was conducted to identify the major themes. These reveal that the Escape Room Exercise served well to raise students' awareness and understanding about what constitutes effective teamwork, the felt need to focus on team process planning before diving into the project, and the individual skills and attitudes each team member felt they needed to develop if their team is to achieve its goals. An overarching theme was (47 out of 49 participants noted) students' experientially based understanding that teamwork is much better for accomplishing complex tasks compared to individual work. Surprisingly, this included students in majority of the teams that failed to complete all the puzzles and were unable to "escape" or win, and instead faced disappointment and defeat. Yet students weighed in favor of teams and recognized what worked and where they needed future improvements and skill-building. Next, we highlight the themes we drew from students' individual responses to the reflection questions.

Table 1: Students' Learning from the Escape Room Exercise

Theme	Key Learning	Quotes from students' reflections after the exercise
Effective Teamwork Components.	Open & frequent Communication. Collaborative attitude from every member. Absence of social loafing.	"Open communication with every member sharing ideas (lack of social loafing) helped the team to solve puzzles efficiently. This showed that combining the efforts of team members results in swifter task completion." "Working collaboratively, encouraging and accepting attitude aimed at finding the right answer to the puzzles without arguments or judgments, increased team members' motivation. This showed that accepting and trying out every idea, no pressure to solve parts any member did not know because others were there to help out - increased team members' feelings of responsibility towards the team."

<p>Felt need for planning the team process.</p>	<p>Need to proactively plan team process.</p> <p>Need for team roles, especially leader role</p> <p>Need for constructive conflict.</p>	<p>“When task got more complex and required more creativity and out-of-the-box thinking, simply pooling individual ideas and brainstorming did not work (as it had before). With complex, creative aspects of the exercise, rushing ahead without adequate planning and thinking through instructions, getting everyone on the same page, does not work. Team did not know how to generate and utilize synergy.”</p> <p>“I would ask someone to take leadership so that our efforts would be more organized and streamlined.</p> <p>“Groupthink crept in – members realized the team’s strategy was not working but withdrew rather than expressing that the team needed to change its game-plan.”</p>
<p>Felt need for individual skill development.</p>	<p>Combination of assertiveness and cooperativeness.</p> <p>Taking a “big picture” view.</p> <p>Taking initiative & leadership.</p>	<p>“Individually, I would let team members know when I thought they should give up on their idea and move to something else.”</p> <p>“Individually, I would focus more on coming up with new approaches more rapidly in the future to try and make progress instead of only focusing on one aspect or task.</p> <p>“One action individually would have been to take charge. I think we lacked a leader in our teamwork.”</p>
<p>Teamwork benefits vs individual work</p>	<p>Teams are more efficient for complex tasks.</p> <p>Teamwork increases member motivation on complex tasks.</p>	<p>“If I had done this on my own, it would have taken me much longer than it did with the group. Everyone had different approaches and knowledge that helped speed the process up.”</p> <p>“Being able to work with a team allowed me to ask for others’ help and get their insight on puzzles I struggled with.</p> <p>“Working with other people kept me motivated (and gave) better chance of completion.”</p>

5. Conclusion

This paper is aimed primarily at two types of college professors: (a) those who want to educate their students on the importance of team over individual efforts and highlight how working in teams requires a different set of attitudes and skills, and (b) those who are already utilizing team building steps such as the team charter and peer evaluations, and are looking for an efficient way to “set the stage,” increase students’ receptiveness to team building and development of soft skills. As our results indicate, the Escape Room exercise actively engages college students and generates insights through their first-hand experience. It creates the felt need for (a) teamwork in complex endeavors, and (b) early attention to planning the process of team interactions. It also increases students’ awareness of which actions add and subtract from team effectiveness, and how they should develop their own skills to aid in the process. Thus, college instructors can, within one 75-minute class period, take an important step in shaping students’ positive attitudes and motivation for team building. This exercise is particularly well-suited to classes that include team dynamics as a topic such as Organizational Behavior, Leadership, Group Dynamics, Organizational Communication, and Conflict Management. Future research could generate additional findings by conducting this exercise in other classes, both in and those outside the business school, that utilize team projects to enhance students’ teamwork knowledge and skills. College professors in other disciplines who utilize team projects in their classes could consider using this innovative approach to increase students’ awareness of the team process and how to improve it in order to do well on the team project.

References

- Bryant, S. M., & Albring, S. M. (2006). Effective team building: Guidance for accounting educators. *Issues in Accounting Education*, 21 (3): 241-265. <https://doi.org/10.2308/IACE.2006.21.3.241>
- Conklin, T., & Boulamatsi, A. (2020). Decision-making: The process is the content in an experience-based classroom. *Decision Sciences Journal of Innovative Education*, 18(4): 635-658. <https://doi.org/10.1111/dsji.12224>
- Gresch, E., Saunders, M., & Rawls, J. (2020). Are we bonding yet? Using a mixed-methods survey design to evaluate team-building exercise outcomes. *Business Education Innovation Journal*, 12(1): 83-91. http://www.beijournal.com/images/V12_N1_final_9_11.pdf
- Halfhill, T. R., & Nielson, T. M. (2007). Quantifying the “softer side” of management education: An example using teamwork competencies. *Journal of Management Education*, 31(1): 64-80. <https://doi.org/10.1177/1052562906287777>
- Hillier, J. & Dunn-Jensen, L. (2012). Groups meet . . . Teams improve: Building teams that learn. *Journal of Management Education*, 37(5): 704-733. <https://doi.org/10.1177/1052562912459947>

- Hunsaker, P., Pavett, C., & Hunsaker, J. (2011). Increasing student-learning team effectiveness with team charters. *Journal of Education for Business*, 86(3): 127-139. <https://doi.org/10.1080/08832323.2010.489588>
- Jassawalla, A., & Sashittal, H. (2017). What students think and do in classroom teams when peer evaluations are highly consequential: A two-stage study. *Decision Sciences Journal of Innovative Education*, 15(2): 219-247. <https://doi.org/10.1111/dsji.12127>
- Kolb, A., & Kolb, D. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2): 192-212. <https://doi.org/10.5465/amle.2005.17268566>
- Saghafian, M., & O' Neill, D. K. (2018). A phenomenological study of teamwork in online and face-to-face teams. *Higher Education*, 75(1): 57-73. <https://doi.org/10.1007/S10734-017-0122-4>
- Schartel Dunn, S., Dawson, M., & Block, B. (2021). Teaching teamwork in the business school. *Journal of Education for Business*, 96(6): 381-386. <https://doi.org/10.1080/08832323.2020.1840322>