Assessment
in
Practice

Using an Escape Room to Raise Campus Awareness of Institutional Student Learning Outcomes

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Chattanooga State Community College developed an escape room, "The ISLO Challenge," to help promote awareness of the College's Institutional Student Learning Outcomes (ISLOs). Not only has the escape room helped raise awareness of the ISLOs, it helped teach some of the ISLO skills, and has been used by faculty and staff as a team-building exercise.

BACKGROUND

Our goal was to raise campus-wide awareness of Institutional Student Learning Outcomes (ISLOs)—the broad skills students should learn at ChattState regardless of their major. ChattState based its ISLOs primarily on what employers have said they look for in employees, including communication, critical thinking, information literacy, global and cultural awareness, quantitative literacy, work ethic and competence in a specialty.

By raising awareness, we hoped to build a level of support and ownership for the ISLOs. We believe if students (and faculty and staff) understand why they are being asked to engage in certain activities—whether a speech class or group project for instance—they will be more eager to participate.

When we were planning, we considered the usual tools: banners, posters, social media. We created a video featuring alumni and employers discussing the importance of the ISLOs in the workplace (this turned out great—view it here). But we wanted something extra, something that would break through the noise and really get people's attention.

One of our more brilliant and student-centered faculty members suggested that students were into escape rooms, and the ISLO Challenge was conceived.

ESCAPE ROOM PURPOSE

It seemed perfect—escape rooms require critical thinking, teamwork (part of work ethic), and communication, touching at least three of our ISLOs. It would be hands-on, engaging and fun, and would tie nicely to our focus on high-impact practices and experiential learning. But was it feasible?

WHAT IS AN ESCAPE ROOM?

None of us had actually been through an escape room, though we had heard of them. We called a local company to discuss possibilities for the project and were invited to test-run one of their games. Four of us found ourselves in a set of rooms with the goal of finding a precious object that would unlock the door to the Mystery Mansion within an hour or less. We had to work together to follow clues and master mental puzzles that would unlock boxes revealing more puzzles and clues to the next box. A Voice From Above gave us hints when we stalled for too long and answered questions when we asked them. Time ran out before we completed the game, but we all agreed it was a fun and worthwhile experience.

ESCAPE ROOM GAMES

Blessed with grant money for our project, we were able to hire the "escape room guys" from the local company we had visited. We discussed goals, constraints and budget, and they set to work to design a game just for us.

We need an entire class of 28-32 students to go through the game at once, during class time, so the game was limited to 45 minutes. Since teams should be no larger than eight members, we divided a regular classroom into four quadrants using pipe and drape to create four identical games.

In recognition of the workforce connection to our ISLOs, the consultants developed a theme based on submitting a resume to an employer. The scene: Our imagined employer is ready to hire the team, but the team's resume has been lost and is required. Hiring closes in 45 minutes. The resume is on the advisor's computer and the advisor is out of town, so with the advisor's blessing, the team must navigate puzzles and clues within his office to gain access to the resume.

The consultants had four rough "desks" built, each as a prop for the same 45-minute game. The game had to be portable so each desk has wheels and a cabinet that doubles as a locked part of the game and storage for all of the lock boxes when the game must be moved.

In total, there are seven puzzles. The first one is very easy, leading to an early sense of satisfaction and excitement when the first box opens. The last clue is complex and significantly harder than the rest and works best when the entire team gets involved. To add to the fun, the game uses different types of boxes, locks and tools, including a black light, a small safe, and both numeric and alphabetic combination locks.

Quantitative literacy is well-represented in the puzzle. Office hours are presented as a graph and room numbers are arranged in a pattern with occasional blanks that must be calculated. Global and cultural awareness is touched upon with a world map and imaginary travelers who cross time zones that must be converted to Eastern Standard Time. Together with communication, critical thinking, and work ethic, the game incorporates at least five of our seven ISLOs.
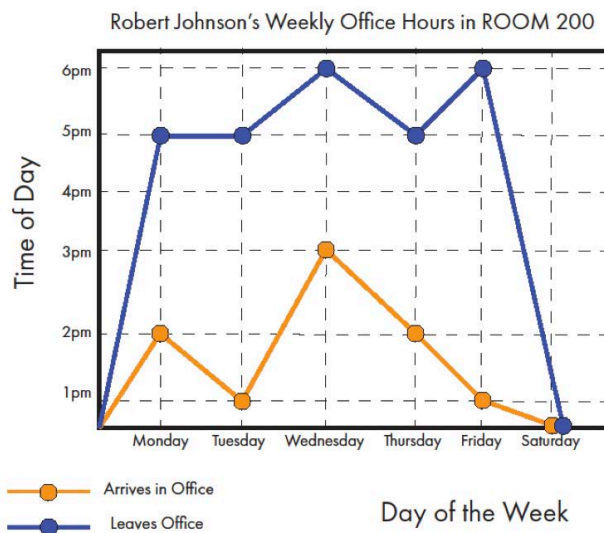
The game itself makes little attempt to brand the activities with the ISLO brand. We have not tried to point out "This puzzle promotes quantitative literacy skills." Instead, we felt it would be more effective to ask students to reflect on the ISLOs afterwards and connect them to the performance of their teams. Students in College Success courses are asked to choose from a list of prompts and reflect on at least two ISLOs within their ePortfolios. Here are some sample prompts:

1. **ISLOs From an Employer's Perspective.** If a prospective employer were observing your work on the ISLO Challenge, how would he or she assess your performance? Do you think you would you get the job? Why or why not? Make sure you discuss at least two of the ISLOs in your response.
2. **ISLOs on Your Current Job.** Do you currently have a job outside of college? Think of about at least two of the skills used in the ISLO Challenge and describe how you use them in your current job. How do you think these skills will apply to your career and the job you hope to get some day?
3. **ISLO Self-Improvement.** What would you change if you had the chance to play the ISLO Challenge over again? What two or more ISLO skills would you improve to make this change, and how would you seek to improve them?

Those who do not use ePortfolio are asked to complete a simple exercise in which, as a team, they match each ISLO with the various clues of the puzzle (see Appendix).

RESULTS

The escape room fits into a broader module on ISLOs within the College Success course. In a survey of College Success course students, 44% reported being "very" or "extremely" aware of the campus ISLOs, with another 39% reporting they were "somewhat" familiar with them. Seventy-one percent of students recognized that they had heard about the ISLOs from the escape room, among other sources. We were disappointed that only 31% of students were able to identify that Chattanooga State's ISLOs were based on skills employers say they need, but in general we feel that the escape room and the ISLO campaign is meeting the objective of raising awareness of the ISLOs.

POSTSCRIPT: BEST PRACTICES

1. Running the games is labor intensive. There should be at least one "game master" in the room, and for best results, two—each one standing at an intersection of two quadrants and keeping up with two games. The role of the game master is to introduce the premise of the game, watch the progress of the participants in order to offer a hint when they get stuck, and troubleshoot when things go wrong (such as a lock that won't open or a clue that has been misplaced). The game master also re-sets the clues and boxes after the game is over. We have sixteen students who work as ePortfolio peer mentors and were able to use their time to serve as game masters, but we have also determined that we need an additional "senior game master" to provide continuity and maintain the room.
2. Training the staff is really important. The game is fun because participants have to think for themselves. The excitement when a team figures out a puzzle is palpable. Giving too many hints robs them of this. On the other hand, letting a group struggle to the point of frustration is counter-productive, especially with students who are already feeling defeated in their classes. The game master needs to offer a nudge when needed, but they should be hints, not "the answer." We wrote a set of appropriate hints for each puzzle to help our game masters with this.

3. Use colored stickers on the backs of clues to make the reset quicker. We not only marked each box and its clues by colored dots, we labeled them "A, B, C & D" for the corresponding quadrant in case the clues get mixed up, and we added small labels such as "1 of 3" so that game masters can quickly make sure they have the right number of clues in the right boxes. This is really important—misplaced or missing clues can derail the game and make recovery difficult. However, the game master needs to tell the teams to ignore these labels so that participants don't think they are part of the game.
4. Be flexible about calculators. The math in the game is simple, but students are so accustomed to using calculators that they can get bogged down. Sometimes the "nerdy math kid" emerges as the hero and this is a good thing, but when the whole group is stumped by simple math, there is no reason to belabor the point. Hand them a calculator.
5. Don't buy the cheap stuff. Approximately 1500 students have played the escape game. Things cannot be fragile. For instance, we have some photos in frames. The frames need to be sturdy, but we learned the hard way that we should use plexiglass instead of glass. Inevitably, even things that are not fragile break.
6. Participants fidget with locks and inadvertently change combinations. Safes get locked into the open position, batteries fall out or get weak. Clues get worn out and need to be replaced. In addition to being cheerful, pleasant and meticulous, the senior game master needs to have basic screwdriver and troubleshooting skills.

7. Everything should have a backup. Purchase lock cutters and extra locks, and pre-set them to the correct combinations for quick replacement during the game. We also created an entire set of backup boxes so that the game master could grab the correct one and quickly replace it in the game when needed.
8. Even though the groups can hear one another, students are so focused on their own game that they do not listen to the other teams. However, some teams do get discouraged and give up when they hear another team celebrate

because they have completed the game. We have not been able to solve this problem, except to give more hints to teams that are struggling so that they (roughly) keep up with the other teams. We developed a timeline for the game masters so that they know to intervene when a team is behind where they need to be.

9. The timer adds to the fun and excitement (and inevitable competition), but doesn't have to end the game. If students do not need to rush off to class, many of them are eager to stay and finish the game even though the timer has already sounded. We admire this work ethic.

10. Adjust the game as you go. If some clues are too easy or too tough, tweak them.

11. Interestingly, the game not only raises awareness of the ISLOs, it actually teaches some of these skills such as critical thinking, communications and work ethic. In particular, teamwork (part of our definition of work ethic) becomes obvious as a needed skill. Some managers and department heads have found the game to be an effective team-building opportunity for their staff and faculty.

12. Most importantly, remember the purpose of the game. If students do not either complete an ePortfolio reflection using the ISLO prompts or complete the matching exercise, they will not make the connection to the ISLOs and we have not achieved our goal. Next year we will ask every group to complete the matching exercise, just in case the professor does not pursue the ePortfolio reflection

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About NILOA

The National Institute for Learning Outcomes Assessment (NILOA) was established in December 2008, and is co-located at the University of Illinois and Indiana University.

The NILOA website contains free assessment resources and can be found at http://www. learningoutcomesassessment.org.

The NILOA research team has scanned institutional websites, surveyed chief academic officers, and commissioned a series of occasional papers.
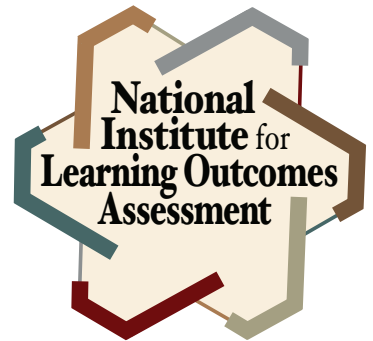
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