ABSTRACT

As part of its implementation of a required capstone course for all MBA candidates, the University of Pittsburgh’s Joseph M. Katz Graduate School of Business has stretched the boundaries of the traditional experience-based learning (EBL) modality of an online business simulation to incorporate oversight of student executive teams by boards of directors while the students run their simulated companies. This model grew out of the school’s desire to extend the learning beyond the online simulation to include interaction with a real life board of directors that provides corporate governance, models experiences that students will have with boards in their future careers, and requires students to develop and demonstrate proficiency in communicating effectively and influencing stakeholders. The boards in turn provide an invaluable real world component to the simulation while creating a permeable boundary between the classroom and the business world that is mutually beneficial to the university’s outreach and to alumni engagement.

INTRODUCTION

As the University of Pittsburgh’s Joseph M. Katz Graduate School of Business began investing increasingly in experience-based learning (EBL) to differentiate its MBA program (Good et al, 2019), establishing a required capstone course was one of the top priorities to drive students’ professional development and readiness to re-enter the professional world (Pieri et al, 2019). Proceeding in that direction, faculty and the school had focused on goals similar to those of other Association to Advance Collegiate Schools of Business (AACSB) business schools embarking on that path including, "creating a singular capstone course for all MBA students...summtive of the MBA experience...contain[ing] a business simulation that would assess students in multiple content areas [including] management, leadership, finance, marketing” and more (Woods & Cardenas, 2019). In turn, the creation of a required capstone course also directly addressed the school’s learning goals as defined by its Masters Policy Committee (MPC) in the domains of communication, critical thinking, leadership, and multicultural awareness. (See Exhibit 1: University of Pittsburgh Joseph M. Katz Graduate School of Business Learning Goals.) While the course initially got off the ground in 2013, the faculty continued to push the envelope with the goal of expanding the boundaries of the simulation and tying the student experience closer to real life. From there, the idea was born to match the student executive teams running each simulated company with a volunteer board of directors made up of senior university alumni, friends of the school, and a small number of capstone course graduates. This was both consistent with emerging practice – “A number of schools are experimenting with combinations of faculty [and] alumni to oversee these [experiential learning] projects.” (Datar et al, 2011) – and in turn aligned directly to the AACSB (2016) report A Collective Vision for Business Education which highlights three imperatives for business schools going forward – all of which the volunteer boards of directors represent:

- Cultivate a position at the intersection of academia and practice – Grow and develop the rich space between theory and practice.
- Be a driver of innovation in higher education – Lead in the creation of new systems, standards, and traditions for education, knowledge creation, and outreach.
- Connect with other disciplines – Intersect with experts, educators, and innovators from other fields.

From that first seed of an idea about incorporating volunteer boards of directors to the rich community of volunteer board members now engaged with the capstone course today, the construct has become an integral component of the capstone course and the school’s broader EBL commitment.

BOARD SELECTION AND COMPOSITION

To seed the pool of board members initially, the business simulation capstone faculty instructor began by working with the school’s alumni relations office to identify and recruit interested candidates. The faculty instructor then formed the initial boards, including selecting a core group of board chairs from among the larger group of volunteers. Having established that base structure,
the selection and composition of boards has evolved incrementally over time while still drawing heavily on school alumni. Furthermore, board retention remains around 90 percent, which means that a relatively small number of new volunteer board members need to be incorporated each term. When needed, new board member candidates submit a resume and speak with the faculty instructor for initial vetting before being matched with a veteran board if there is a fit. For recent course alumni interested in serving as board members, there is a two-year waiting period to ensure that they are not put in the potentially awkward position of serving as a board member for a student team comprised in part of students they may have known or worked with before graduating. Looking back, since the inception of the capstone course over six academic years ago, the course has benefitted from the contributions of 160+ volunteer board members averaging six terms each of volunteering as board members. The core group of volunteers – the board chairs – average an impressive 15 terms (five academic years) of volunteering, which has created great continuity in the program. (See Exhibit 2: Count of Board Members by Number of Terms Volunteered.)

That is not to say that the board selection and formation processes have not been without challenges as the course has evolved. For example, depending on the size of each term’s student enrollment, there have been challenges rightsizing the pool of volunteers to generate the optimal number of boards. Similarly, certain functional skill sets (e.g., corporate finance) have proven harder to source for in the volunteer population. Accordingly, based on each volunteer’s professional background and experience, each board has to some extent taken on its own personality, which has sometimes led to inconsistency in approach, tone, and points of emphasis between boards. Further, once the boards are established and the course is underway each term, other challenges arise on
PROCESS AND QUALITY CONTROL

Prior to the start of each term, the collection of volunteers is formed into individual boards and matched to student teams that are responsible for running their multi-national manufacturing company as a C-suite of executives throughout the semester-long business simulation. The board formation process starts with a survey to the pool of volunteers asking them to express interest (or not) in serving as a volunteer board member for the coming term. In parallel, the number of boards needed is calculated based on course enrollments for the coming term. (Generally speaking, 8-10 boards of approximately five board volunteers each are needed each term.) Once all responses are received, boards are formed with consideration given to the following:

- Keeping board chairs together with board members they have worked with in the past, where possible.
- Ensuring logistical compatibility (e.g., day/evening availability, specific day of the week availability, etc.).
- Balancing local and remote board members.
- Ensuring a mix of senior executive alumni with more recent course graduates.

Once the individual boards have been formed, the matches have been made with the student teams, and the term begins, the boards play the role of providing corporate governance as part of the students’ EBL experience. That is to say, the boards do not function as operating boards providing direct input on student decisions or prescriptive guidance on how to run the company. Rather, they function as governance boards with ultimate decision rights over major capital decisions (e.g., facility construction, dividend policy, share issuance/buyback, etc.) just like real life boards of directors of publicly traded companies. This oversight of integrated decisions hearkens back to the fact that “Other than through experiential learning activities, rarely do students have an opportunity to integrate skills and tools taught in one course with those taught in another.” (Hart & Mrad, 2013). From a teaching perspective, any group of MBA students can make decisions about running a company, but having a “boss” (in the form of the board of directors) requires students to convince their board that the students’ decisions are the right ones. That is the real world skill the students are compelled to practice through delivering clear, concise and convincing business cases to their boards. For students, knowing the right decision is good, but – just as in real life – it only counts if they are able to convince someone that it is the right decision. The boards are the ones that provide that governance.

To perform their governance role, the boards hold three board meetings each term in which the student executive teams are accountable for reporting on company performance to date, competitor strategy and actions, and actions going forward to execute against company strategy. Finally, at the conclusion of each board meeting, the board completes a standardized evaluation instrument developed in collaboration with the school’s MBA program office which is provided back to the faculty instructor as an input toward a portion of the students’ course grade. In all, this, “multidisciplinary integration coupled with experiential learning methods…better reflect the real-world business environment where teams and integrated processes are typically used to solve problems...and strategically manage the firm...” (Navarro, 2008)

COMMUNITY MANAGEMENT

Throughout and between terms, an extensive amount of effort goes into managing the community of volunteer board members in order to build lasting relationships, foster greater investment in the capstone course, and cultivate a collegial networking atmosphere across the entire population. These efforts fall broadly into the categories of events, recognition, and two-way feedback which are both real-time and asynchronous.

The events start with board member orientation/refresher sessions at the beginning of each term. These sessions are offered remotely to maximize convenience for the volunteers. The sessions are required for first-time board members and optional for all others. The content covers key board members deliverables, resources, and the faculty instructor’s and MBA program’s expectations for the volunteers’ involvement. In addition, events at the beginning of the fall and spring terms also include board chair dinners hosted by the faculty and school. These alternate between a formal recognition dinner attended by members of the Dean’s Office, the MBA office, and senior faculty in the fall term and an informal “working session” dinner with casual food offerings and a chance to focus on continuous feedback and enhancements in the spring term.

The main themes from these dinner events – recognition and continuous feedback – then carry through into asynchronous engagement activities throughout the year. Recognition takes the form of two types of service awards. First are those given to board members who hit milestones for numbers of terms served. There is an initial service award after two years and a second service award after four years, both of which are high quality gifts branded with the business school logo. The second type of service awards are those given to all board members whose student executive teams’ companies exceed an objective benchmark for investor expectations that is laid out at the beginning of each term. (Interestingly, these engraved “star” awards, while token in nature, have become very popular with the volunteer board members and a point of pride for them each term for guiding winning student executive teams.) Continuous feedback then takes the form of a survey report at the end each term. Stepping back for a moment, the, “primary role of MBA education is to set in motion a learning process for advancing managerial skills into intermediate stages while
equipping graduates with learning tools that support development beyond graduation.” (Varela et al, 2013). With that in mind, one of the students’ final reflection activities in the course is to complete a required survey with a combination of Likert-scale questions and free-form questions about their experience working with their volunteer board of directors. The faculty instructor then consolidates the survey results into anonymized reports that are provided back to each board to provide feedback on how their contributions were perceived by the students in the spirit of continuous improvement.

The final pillar of asynchronous community management is a private online community on a popular social networking platform. The online group is limited to past and current faculty and volunteer board members and provides members with a “badge” for their online profile as well as an area for online discussion of everything from two-way feedback about the course to trends in business education to current events related to the simulation. This online group is the newest addition to the larger suite of community management efforts and holds much promise for supplementing the longstanding efforts noted above.

**FUTURE DIRECTIONS AND MEASUREMENT**

Before looking ahead, it is worthwhile to revisit the definition of a business simulation game both to frame the impact of the boards of directors and to inform future directions for enhancing this aspect of the capstone course: “A simulation game combines the features of both a game and a simulation. In general, the goal of a game is to determine win or lose, and that of a simulation is to identify the relationship between causes and effects of a decision.” (Tao et al, 2015). Given that dual purpose – driving both results and consequential thinking – the value add of the volunteer boards of directors is hard to overstate. As the capstone course continues to evolve, two proximate areas of focus will strengthen the board of directors construct even further. First is an emphasis on creating more intact boards of directors. While there has been strong consistency and tenure among board chairs, they are frequently paired with a rotating set of associated board members based on practical considerations such as day/evening availability and in person vs. remote presence for board meetings. Historically, every effort has been made to keep boards intact where possible; however, more work needs to be done to drive that coherence. Boards that remain intact from term to term provide a better student experience due to the consistency of approach among board members, the complementary functional perspective that each board member brings, and the greater measure of accountability for board performance. The second area of focus to enhance the board volunteer program involves increasing the depth of community management as the required capstone course enters its seventh year. Activities include more active curation of the online community, more real-time engagement with the board members, and emphasis on recruiting new board members from the growing ranks of course alumni. This will serve the two-fold purpose of ensuring a strong pipeline of volunteer talent as well as raising the bar on both board member contributions as well as the cachet of being selected to serve as a

**EXHIBIT 3:**

**Sample Student Survey Feedback Regarding Experience with Boards of Directors**

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree or Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My board did not micro-manage and therefore allowed opportunities for learning through failure.</td>
<td>88%</td>
</tr>
<tr>
<td>My board provided quality constructive feedback regarding team performance.</td>
<td>81%</td>
</tr>
<tr>
<td>My board was invested in the success of the team [students].</td>
<td>80%</td>
</tr>
<tr>
<td>My board was invested in the success of the company.</td>
<td>77%</td>
</tr>
<tr>
<td>My board added to the overall learning experience of the class.</td>
<td>77%</td>
</tr>
<tr>
<td>My board provided quality constructive feedback regarding our strategy.</td>
<td>75%</td>
</tr>
</tbody>
</table>

Note: N = 131 for Fall 2018, Spring 2019, and Summer 2019 terms.

List one thing your board provided that was very valuable.
- “The board positively pushed us to think about the organization as a genuine company.”
- “Asked questions that allowed us to find a solution versus leading questions or just telling us what to do”
- “Provided advice, but let us learn by doing”
- “Our board provided great insight on how to present information to boards/executives as well as useful tips on different marketing, cash management, and asset sales [concepts].”

List one thing you wish your board would have done differently.
- “Been more clear on expectations as a whole. Each member seemingly had different goals/wanted to see different things, which was hard to de-cypher [sic] and made working with them relatively difficult because we didn't know what to provide.”
- “I wish our board would have given consistent, constructive feedback throughout the simulation. The majority of the feedback was simply how we were wrong or they did not like our decisions, and not in regards to how we could better succeed.”
board member – all of which is designed to drive a virtuous cycle of strengthening the capstone experience, increasing board member engagement, and most of all enhancing student outcomes.

Finally, with the board of directors construct now firmly established in the capstone course, an additional future direction is to perform more thorough quantitative assessment of the impact and effectiveness of the boards. Currently, the course features a wide variety of evaluation instruments that so far have yielded a wide variety of descriptive statistics. Examples include counts and tenure of board members each term; boards’ evaluations of their student teams’ performance using a standard survey instrument three times per term; students’ self- and peer evaluations twice per term; students’ evaluations of their boards at the end of the term (See Exhibit 3: Sample Student Survey Feedback Regarding Experience with Boards of Directors); student teams’ final standings in the simulation; and finally traditional measurement instruments such as a standardized, multiple choice final exam. To date, a selection of these descriptive measures have been shared as part of standard Assurance of Learning (AOL) reports related to AACSB accreditation (See Exhibit 4: Final Exam Results – Academic Year (AY) 2016 to AY 2019); however, a future direction will be to explore what the data show with respect to causation and correlation between the board of directors experience and student outcomes. Such research questions include the following:

- Is there any correlation (positive or negative) between the size of the board and a student team’s performance in the simulation?
- To what extent is there a relationship between the board’s assessment of student team performance and student performance on the final rankings? The objective final exam?
- Do certain boards’ student teams consistently outperform other boards’ student teams?
- Do more tenured boards’ student teams consistently outperform less tenured boards’ student teams?
- Are certain board evaluation results leading indicators of how well the student team will finish in the final rankings?
- Do students self-evaluations correlate to the boards’ evaluations?

Further research questions will certainly emerge, and we look forward to analyzing and reporting on the results in the future.

**EXHIBIT 4:**
Final Exam Results – Academic Year (AY) 2016 to AY 2019
ACKNOWLEDGEMENTS

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REFERENCES


