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## HIGH IMPACT PRACTICES – ADDRESSING WORKPLACE NEEDS

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### Introduction

For at least three decades, employers have observed a gap between the skills they look for in recent college graduates and the skills these graduates possess. This has been noted in multiple studies involving both direct employer input and curricular reviews to determine alignment with professional standards (Association of American Colleges & Universities [AAC&U], 2013, Azevedo, Apfelthaler, & Hurst, 2012; Bayerlein & Timpson, 2017; Hart Research Associates, 2006a; 2006b; 2008; 2010; 2013; 2015; 2018; Pratt, Keys, & Wirkus, 2014; Ray, Stallard, & Hunt, 1994; Ullah, Kimani, Bai, & Ahmed, 2018). These studies have also indicated consistency in the specific skills that employers value, typically written and oral communication, teamwork, ethical decision-making, critical thinking, and the ability to apply knowledge in real-life situations (Hart Research Associates, 2015). These are prioritized by most employers over technical or discipline-specific knowledge and abilities (Hart Research Associates, 2015).

Possession of these skills, referred to as cross-cutting skills in that they are important across academic disciplines and professions, prepare individuals for lifelong learning as those who possess them have greater ability to re-skill or up-skill as needed throughout their working lives. This study examined the effectiveness of high impact practices (HIPs), or activities that require a “worthwhile investment of student time and effort” (Kuh, O’Donnell, & Schneider, 2017; p.9). HIPs are designed to help learners develop the cross-cutting skills needed for the workplace. Selected HIPs were implemented in a required course for business students at a large, regional, open admission university. The course is taught in multiple modalities (face-to-face, blended, and online). In particular, students in the online version of the course are required to navigate multiple forms of technology to collaborate as virtual teams as they learn together. The objective of the study was to determine the impact of four high impact practices – writing intensive courses, collaborative assignments and projects, community-based learning, and ePortfolio – in preparing students for their future professions.

### Literature Review

High impact practices were first identified as such in 2006 (Kuh et al., 2017). Derived from what were called engaging educational practices based on both data and anecdote reflecting “accumulated wisdom” (Kuh et al., 2017; p.9), they were included in the National Survey of Student Engagement (NSSE), a standardized self-report instrument that explores students’ learning experiences in higher education. These engaging practices demonstrated strong

relationships with other NSSE scales such as academic challenge, active and collaborative learning, student-faculty interaction, and supportive campus environment; they were also highly correlated with the following NSSE learning outcomes: critical thinking, writing competence, and quantitative reasoning (Kuh et al., 2017).

The practices that have been identified as high impact include common intellectual experiences, learning communities, writing and inquiry intensive courses, first-year seminars and experiences, collaborative assignments, undergraduate research; diversity/study away/global learning; service learning, community-based learning; internships and field experiences; capstone courses and projects; and ePortfolio. In addition to data from instruments such as the NSSE, each of these practices has independent lines of research pointing to its effectiveness in a range of contexts. This review briefly examines the four HIPs that are the focus of this study.

Many universities, particularly in the United States, have a required writing course which students typically take in the first year of university; sometimes this is a two-course sequence in the first and second semesters. Although some institutions also require an advanced level writing course in the third or fourth year of study, which may focus on writing in the discipline, in other cases, a certain number of writing intensive courses are required. The purpose of these is to help students continue to develop their skills after the first-year writing course and provide a discipline-based writing experience. These courses typically meet certain requirements in order to be designated as writing intensive: writing skills are explicitly taught, students receive feedback on their writing and the opportunity revise, a certain number of papers or words is designated, writing constitutes a certain percentage of the final grade, support services such as writing centre student tutors are utilized, classes are small in size (e.g., 15-25 students), and classes are taught by a faculty member rather than a teaching assistant (Farris & Smith, 1992). The focus is on writing to learn and learning to write. Writing intensive courses help fill the gap between what students view as their level of preparation and the views of their employers. In one study, while 65% of recent college graduates felt well-prepared in this area, only 27% of employers concurred (Hart Research Associates, 2015).

Collaborative learning, or teamwork, has been used extensively in business education as it deepens learning, develops critical thinking skills, improves motivation, aids knowledge retention, and establishes professional competencies (Biggs & Tang, 2011; Hall, Ramsay, & Raven, 2004; Ohl & Cates, 2006; Scott-Ladd & Chan, 2008; Volkov & Volkov, 2015; Wageman & Gordon, 2005). However, students may object to it on the basis of previous negative experiences, preferences for working alone, problems with social loafing, scheduling issues, and lack of skill for doing it well (Pfaff & Huddleson, 2003; Schultz, Wilson, & Hess, 2010). As such, it needs to be carefully structured and explicitly taught.

Online teams may have difficulty establishing communication protocols, in part due to the inability to see facial expressions (if video conferencing is not used); however, online teams have also observed an increased task-focus in that they avoid casual chatter and get straight to

the point (Saghafian & O'Neill, 2017). Developing the skill to work in virtual teams is increasingly relevant and may require somewhat different skills than communicating in a face-to-face context. Few business schools accredited by the Association to Advance Collegiate Business Schools (AACSB) are actively assessing teamwork, however, in spite of its emphasis by employers (Hart Research Associates, 2015). In 2007, 42% of business school deans reported assessing teamwork (Martell, 2007) compared to 26.5% in 2010 (Kelley et al., 2010) and none in 2015 (Wheeling et al., 2015).

Research on service and community-engaged learning demonstrates the following types of outcomes: personal (increasing self-efficacy, forming one's identity, growing spiritually, developing morally, learning to work with others, exploring leadership potential, and communicating effectively); social (addressing stereotypes, improving cultural and racial understanding, becoming more socially responsible, engaging in good citizenship behaviours, and establishing commitment to service); learning (increasing capability to apply and deepen knowledge, think critically, and problem-solve); and career development (exploring career choices, establishing connections, and increasing employability) (Eyler, Giles, Stenson, & Gray, 2001). Such projects help students form connections to their communities in a reciprocal relationship in which they contribute their developing knowledge of academic concepts to address real-life problems and community partners share actual experience and insights.

ePortfolios, which entail students creating artifacts that represent their learning (Cambridge, 2010; Miller & Morgaine, 2009; Watson et al., 2016), may involve the demonstration of content mastery as well as the integration of learning across courses. They are a sort of personal learning space characterized by reflection on one's strengths and weaknesses as a learner and related goal-setting (Dalziel, 2012). They can be shared with employers to provide evidence of learning and used for on-going professional development in the workplace (Dalziel, 2012; Moretti & Giovannini, 2011; Smith & Tillema; 2003). They also serve as an alternative form of assessment, offering insights into how students apply their learning and progress over time; overall, the goal of an ePortfolio is to create "stories of deep learning" (Finger & Jamieson-Proctor, 2009; p.69). ePortfolio outcomes include competencies such as "active learning; goal setting; autonomous learning; collaborative learning; cross-curricular competencies; interpersonal communication; self-assessment; digital literacy; work-readiness; lifelong learning; self-management; higher order thinking; and self-awareness" (Watty & McKay, 2015; p.199; Zinger & Sinclair, 2014).

Any practice that has the goal of engaging students' time and effort to achieve desired learning outcomes can be high impact. The list of eleven HIPs is not meant to be all inclusive. HIPs have been referred to as "a demonstrably powerful set of interventions to foster student success," with success defined as "an undergraduate experience marked by academic achievement, engagement in educationally purposeful activities, satisfaction, persistence, attainment of educational objectives, and acquisition of desired learning outcomes that prepare one to live an economically self-sufficient, civically responsible, and rewarding life" (Kuh et al., 2017; p.9). The eight key elements of HIPs provide a helpful framework for

developing and implementing HIPs, which could be course- or institution-specific. These elements consist of high performance expectations; a significant investment of concentrated effort over time; interactions with faculty and peers over important matters; experiences with diversity where students work with individuals unfamiliar to them; regular, timely, and helpful feedback; real-life application of learning; public demonstration of expertise; and structured reflection and integration (Kuh & O'Donnell, 2013).

## **Methods**

Students in three sections of an introduction to organizational behaviour course at a large, open admission regional university participated in this study. The total number of participants was 153. The course is required for all business majors and covers topics such as diversity, personality, job satisfaction, emotions, organizational change, leadership, motivation, power and politics, conflict, and communication. The course is taught across delivery modes – face-to-face, blended, and online, and is structured to help students develop and apply what they are learning through two key tasks: a team ePortfolio and a community engaged project. The former involves students working in teams to identify a key concept or theme, explore it in depth, and demonstrate their learning in an ePortfolio artifact. They need to show how the concept applies in real-life, reflect on what they learned, and evaluate their performance as a team. A rubric outlines expectations for the assignment. This assignment also sets the foundation for a community consulting project in which the teams work with an organization in the community, identify a problem, collect and analyse data, and make recommendations based on organizational behaviour theory. Students report on their community projects in the format of an ePortfolio artifact.

For each artifact submitted, teams evaluate what is working and what is not in terms of their norms and behaviours as a team. At midterm, they complete an additional reflection on their work as teams, determine needed changes to their team charters, and set goals for improvement as needed. This is submitted to the instructor in a brief report. At the end of the semester, students respond individually to key questions to reflect on their teamwork in the course. For this study, all of these documents were examined to determine learning outcomes using the framework of high impact practices and their elements as a guide. Having multiple measures, both team and individual, allows for triangulation of the data (Creswell, 2013; Trochim, 2006; Yilmaz, 2013). In all cases, the assignments required students to connect with each other through technology, specifically the ePortfolio platform (Google Sites), a discussion forum in the learning management system in which students reviewed and reflected on the work of other teams, and various methods of virtual communication such as Google hangouts or other forms of video conferencing, text messaging, or email. Individual teams determined what worked best for them. Course design was consistent across delivery modes.

The study used qualitative methodology to explore the phenomena of learning outcomes in the form of cross-cutting skills for the workplace. The goal was to understand students' learning experiences through their own stories and deep, rich reflections rather than to test

theory, the focus of quantitative research (Baker & Edwards, 2012). The course assignments noted earlier were reviewed using the constant comparative method to identify commonalities across responses and integrate these into themes. The analysis utilized dependability, or finding repeated outcomes that could be confirmed across study participants. Qualitative research focuses on the context of the phenomena rather than transferability to other situations; however, others can learn from the findings and determine their applicability to new contexts (Trochim, 2006). The transcribed interviews were analysed using NVivo software, which assisted in the process of coding and categorizing the data into themes (Saldana, 2013).

## Findings

A key finding from documents across delivery modes was workplace application of the concepts they studied, which were the focus of their artifacts and the foundation for their recommendations in their community consulting project.

*“I haven't done anything like our eportfolios in any of my classes. It was a fun and interesting way to present our understanding of each concept. We were able to learn each concept really clearly because . . . it required us to look more in depth.”*

*“Most of all, the ePortfolio helped me combine what I was learning through the trainings with the business issues I saw at [name of company]. The ePortfolio was a place to display the thoughts of our team in a clear and organized way. It deepened my learning because I revisited the training modules and reinforced what I learned in them by applying them to real-life situations and writing about it.”*

*“As our group studied purpose and its relation to motivation, we realized that this is very important in helping members of a company work towards a common goal. If the executives of a company can create a culture of a common vision and purpose, the members will work towards that purpose.”*

*“Understanding diversity is critical as it allows employees from all backgrounds to communicate and form an effective team. Our challenge to our fellow classmates is to identify an aspect of diversity that is difficult to understand--then study it. Learn all that you can about those from different backgrounds.”*

Teams also developed leadership and teamwork skills, specifically being open to different ideas and acting on feedback from peers and the instructor in order to set goals for improvement.

*“Each team member has taken on leadership in a different part of this semester-long project. Although we have a mix of formal and informal*

*leadership styles, our dedication to lead by example has given us great success. “. . . Having a group project to accomplish via the internet has been new to many of us, and we have all done a great job opening up to new ideas and being willing to try something that might fail. We try to take the constructive criticism from the previous weeks' discussion and implement the ideas in hopes of bettering our score from our previous artifact. We have found leadership to be key in growing our knowledge and teamwork skills.”*

As teams evaluated their performance midway through the course, they determined changes they wanted to make and set goals. These included items such as changing roles, creating new roles (e.g., a polisher to revise the final artifact draft), assigning tasks differently, starting tasks earlier, meeting earlier in the week, responding more promptly to communications, and adhering to deadlines. They also identified ways to improve accountability.

*“If a member of the group doesn't have their piece of the artifact completed by the group-proposed deadline, then it won't be included. Tough. “(We need to be proactive in working together. Guidelines need to be enforced.)*

Teams also demonstrated that they were progressing through the stages of team formation to achieve the performing stage (Tuckman, 1965; Tuckman & Jensen, 1977).

*“Our team comradery has come a long way since the beginning. Every time we meet as a group, we get more comfortable with each other. This helps with sharing ideas because no one is afraid that if they say something it will get shut down.”*

In other cases, teams demonstrated effective communication skills.

*“We all agreed that our biggest strength has been communication. Communication was the first topic of our team charter which was created the first week. We made it our goal to keep a constant open line of communication through group text messaging. Multiple times throughout each week team members update their status via text. This keeps everyone up to date on the progression of group projects. Each team member is then responsible to respond back to the texts or emails within 24 hours. Because the team meets every week during class, we have also done a great job at informing each other when one of us will be absent from class. This allows us to assign each other tasks even though the whole team isn't present. So far, we are all happy with our communication efforts as a team.”*

From their projects, teams noted additional learning outcomes.

*“What we learned is that even a big, well-known company isn't perfect. . . . However, with proper research and a desire to improve, companies can continue to become better and better. We've also learned that no matter what*

*job you end up choosing for a career, you will always need people skills. Learning how to work as a team and lead people to achieve business goals is an invaluable skill.”*

## Conclusions

Overall, the analysis indicated that students were gaining the cross-cutting skills desired by employees through the high impact practices implemented in the course. In particular, application of the content studied to the real-world, particularly to students' own teamwork and to their consulting projects, communication, and teamwork skills were evident. In sum, this study demonstrated that writing intensive courses, collaborative assignments and projects, community-based learning, and ePortfolio are effective in preparing students with the skills needed for their future professions.

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