

6-15-2023

Teaching Tip: GetVirtual: A Universal Service-Based Learning Framework

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Recommended Citation

Toskin, Katarzyna; Pisano, Mark A.; and Corey, Toby (2023) "Teaching Tip: GetVirtual: A Universal Service-Based Learning Framework," *Journal of Information Systems Education*: Vol. 34 : Iss. 2 , 106-117.

Available at: <https://aisel.aisnet.org/jise/vol34/iss2/1>

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Recommended Citation: Toskin, K., Pisano, M. A., & Corey, T. (2023). Teaching Tip: GetVirtual: A Universal Service-Based Learning Framework. *Journal of Information Systems Education*, 34(2), 106-117.

Article Link: <https://jise.org/Volume34/n2/JISE2023v34n2pp106-117.html>

Received: January 26, 2022
Revised: March 25, 2022
Accepted: July 10, 2022
Published: June 15, 2023

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ISSN: 2574-3872 (Online) 1055-3096 (Print)

Teaching Tip

GetVirtual: A Universal Service-Based Learning Framework

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ABSTRACT

This paper introduces a universal framework for service-based learning which provides information systems students with opportunities to gain invaluable hands-on experience. More specifically, through this framework, students can develop hard, soft, and interdisciplinary skills in preparation for their first professional careers upon graduation. In addition to introducing the framework, we provide student testimonials and feedback as well as lessons learned from our experience in efforts to prepare and help other schools interested in offering similar growth opportunities to their students to have a smooth and successful implementation.

Keywords: Teaching tip, Service-learning, Experiential learning & education, Framework, GetVirtual

1. INTRODUCTION

Traditional classroom-based learning prepares students with the skills needed to join the workforce; in many cases, however, it does not completely prepare students with all of the skills desired by the modern work environment (Jackson, 2014; Oraison et al., 2019). Many employers and industries seek candidates who have the technical skills needed to complete the tasks at hand, as well as soft skills (Stewart et al., 2016). Soft skills are based on critical thinking, teamwork, and communication, and are generally learned through experience. Other scholars, educators, and organizations have also emphasized the importance of the interdisciplinary skills as essential in a modern workplace (Bryant & DiAngelo, 2021; Kruck & Teer, 2009; Woodside et al., 2020). One approach to address this need is through service-based learning.

A service-based learning pedagogy mixes traditional classroom learning with hands-on real-world experience, helping students develop their technical and soft skills. This provides an avenue for students to gain hands-on experience by participating in projects that also benefit the community. Most information systems (IS) service-based learning opportunities, however, are integrated into capstone courses as the exit criteria

for the completion of program requirements (Leidig et al., 2006; Smith et al., 2014; Uys, 2019; Wei et al., 2007). This practice has two key limitations. First, as most capstone courses enroll students from the same major, this setting is not representative of a real-life situation because most project teams in a real-world setting are interdisciplinary and require professionals with diverse backgrounds and domain knowledge to collaborate. Second, IS capstone service-based learning projects are often limited to a single client or are heavily focused on the further development of technical skills. Working with a single client limits students' exposure to various business problems and/or needs. Similarly, focusing on technical or hard skills reduces the opportunity for students to hone soft skills.

In addition, there is a void in the current literature regarding systematic approaches, standardized frameworks, guidelines, and pedagogy to help IS faculty develop service-based learning courses that focus on soft skills, including interdisciplinary perspectives, teamwork, and exposure to multiple business problems in one course.

Given the importance and benefits of service-based learning pedagogy, the gap in current approaches, and employers' demand for well-versed IS graduates, we introduce an interdisciplinary service-based framework called GetVirtual.

This framework offers a unique methodology and wide range of resources that provide continued support for faculty and students. In addition, the GetVirtual framework can be easily adopted by any university seeking to enrich the student experience with a focus on soft and interdisciplinary skills, as well as to increase community engagement. In this paper, we share tips, student feedback, and lessons learned from our experience.

2. LITERATURE REVIEW

2.1 Soft Skills

Over the past several decades, there has been a decline in the training offered by employers due to shrinking budgets and an overall cost-savings mentality. Employers, however, desire a well-educated and skilled workforce (MacDermott & Ortiz, 2017). Creating a well-rounded employee has fallen to institutions of higher education to produce and provide. A gap in what is referred to as soft skills has emerged. Soft skills are a collection of skills that include but are not limited to problem solving skills, motivation, persuasion, and critical thinking (MacDermott & Ortiz, 2017).

A study of information technology internship students and industry stakeholders concluded that teamwork and communication skills were the most needed soft skills required by the technology industry (Patacsil & Tablatin, 2017). The study asked both students and their supervisors to rank and rate soft skills by importance using a five-point Likert scale. The soft skills that ranked highest included communication skills, interpersonal skills, management skills, teamwork, presentation skills, dealing with difficult personalities, facilitation skills, and leadership skills (Patacsil & Tablatin, 2017).

A summary of additional surveys by the National Association of College and Educators, Hart Research Associates, and Society of Human Resources found that college graduates lacked soft skills, ranging from communication skills to professionalism and ethics (Martin, 2019). All of these skills lend themselves to service-based learning, in that they are best suited to be learned through experience.

2.2 Interdisciplinary Skills

The current literature on IS education also emphasizes the need for interdisciplinary skills. Interdisciplinary education is achieved by engaging students in real-world problem-solving using different disciplinary perspectives (Bajada & Trayler, 2013). As stated by Kruck and Teer (2009, p. 325), "One important aspect of today's workplace is that teams consist of a mosaic of interdisciplinary members with diverse functional areas as their primary responsibility. Such teams are now at the core of how work is accomplished in today's corporations. Thus, students should learn how to function effectively as members of interdisciplinary teams."

In addition to the need for IS students to thrive as members of interdisciplinary teams, other studies have highlighted the need for an interdisciplinary information systems curriculum, such as technology and accounting analytics, with the aim of increasing the interdisciplinary perspective of students (Woodside et al., 2020). This direction also stems from accrediting bodies. For example, the Association to Advance Collegiate Schools of Business (AACSB) has recently called for a more interdisciplinary focus on business education. In a recent article that discussed 2020 standards, the AACSB

encouraged partnerships within institutions and subsequently increased interdisciplinary and cross-disciplinary work (Bryant & DiAngelo, 2021). In the next subsection, we discuss our findings regarding current service-based learning approaches in the IS discipline.

2.3 What Is Service-Based Learning

Although there are many ways to define service-based learning, there is a common theme to what service-based learning entails. This theme creates opportunities for students to apply classroom learning to real-world experiences that benefit the community. One of the most cited and agreed upon definitions of service-based learning is "... a form of experiential education in which students engage in activities that address human and community needs, together with structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key components of service learning" (Jacoby, 1996, p. 5). The reflection dimension of service-based learning refers to "the instructional design component of structured introspection of the different aspects of the process as well as the outcomes of the project" (Hoxmeier & Lenk, 2003, p. 92). Essentially, by evaluating the work that has been done, a student can learn and enhance their future work. This provides a mechanism for the improvement and reinforcement of traditional classroom learning with hands-on learning. The reciprocity dimension of service-based learning refers to a shared benefit belonging to all the constituents involved in the service project. As a result, everyone benefits from these types of projects. The student gains hands-on learning and real-world experience. The community or organization benefits from the overall project outcome and work being performed by the students. The faculty and university benefit from being able to offer coursework that helps develop students who not only have classroom-based knowledge, but also hands-on reinforcement.

2.3.1 Availability in IS. For decades, research has been conducted across many disciplines on the successful benefits of student learning outcomes and service-based learning (Lee, 2012). The disciplines that have shown a successful record and effort in service-based learning include psychology, education, sociology, social work, and nursing (Petkova, 2017). Service-based learning pedagogy has also been applied to information systems courses, such as information security (Spears, 2018), systems design (Lee, 2012), and information systems project management (Jones & Ceccucci, 2018) and more. However, drawing from experience and prior literature, in most cases service-based pedagogy has been utilized in IS capstone courses (Leidig et al., 2006; Smith et al., 2014; Uys, 2019; Wei et al., 2007). Although there are many benefits of service-based learning in a capstone course, there is a gap in such an approach in terms of matching learning outcomes to employer demands and expectations regarding soft and interdisciplinary skills. First, this approach limits teamwork to IS students only, without the opportunity for students to collaborate with those from other disciplines and achieve interdisciplinary collaboration and perspectives. As such, it does not mimic a real-life work setting, as those often involve experts from various domains, and require people to converge on a solution to a problem. Second, these projects are often focused on single clients or IS-specific solutions with limited exposure to an overarching business

problem, making them discipline-focused rather than interdisciplinary or cross-disciplinary in nature.

Furthermore, there is no common framework in the current literature for implementing service-based learning in IS courses. Additionally, there are very few systematic approaches, guidelines, or methods providing faculty guidance or clear pedagogy for developing such courses (Lee, 2012). In conclusion, the current literature shows some research into service-based learning, but lacks a standardized framework, guidelines, or pedagogy. Instead, the analysis of service-based learning in the IS discipline is based on undergraduate capstone projects or other class-based projects serving the specific technical areas of web development, systems analysis and design, software engineering, project management, database design, and even undergraduate students teaching high school students (Lee, 2012; Petkova, 2017).

2.3.2 Theoretical Lens. There are two key theoretical frameworks discussed in terms of service-based learning in IS: Bloom's taxonomy and Kolb's learning cycle (Lee, 2012; Hoxmeier & Lenk, 2003; Petkova, 2017). Bloom's (1956) taxonomy is one of the most prominent pedagogical frameworks used in a wide array of disciplines. Bloom's taxonomy is intended to help educators assess their learning achievements, define learning objectives, and promote active learning. The revised and most recent Bloom's taxonomy model, as summarized by Krathwohl (2002), redefines the hierarchy of the cognitive process dimension. It is composed of the following six components listed in the order from most to least complex.

- Create – Focuses on the creation or development of a new product.
- Evaluate – Focuses on the ability to support a decision.
- Analyze – Emphasizes the ability to utilize critical thinking skills.
- Apply – Highlights the ability to utilize learned skills.
- Understand – Focuses on the ability to articulate the learned skills.
- Remember – Highlights the ability to retain or recap information.

Unlike the Bloom's taxonomy, which was developed as a tool to help educators assess learning in a traditional classroom environment, Kolb's (1984) "learning cycle" offers the key components to help assess service-based or experiential learning courses. This model is based on four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation, as described below.

- Concrete Experience: First, students are provided with an opportunity to engage in activities and/or new experiences.
- Reflective Observation: Second, students evaluate what they accomplished and what they learned post-task or project. The review process offers insights into what went well and should be repeated or improved in the future.
- Abstract Conceptualization: Next, students form an understanding of what occurred during the experience and formulate conclusions as well as new ideas based on their experience and prior knowledge.

- Active Experimentation: Finally, students apply concepts learned from their experience to new situations.

Kolb's cycle, in contrast to the hierarchy, posits that learning is a continuous process. In addition, Kolb's model emphasizes the importance of student engagement in a task or activity and that learning is best achieved by doing. Thus, Kolb's model is the most suitable theoretical lens for the GetVirtual framework. Specifically, the first two phases, concrete experience and reflective observation, occur directly within the course. The concrete experience phase takes place when students are introduced to real-life business problems and work with their respective clients to create successful solutions. The second phase, reflective observation, occurs upon completion of projects where students reflect on the work they have completed and their overall learning experience. This can be facilitated through written reflection assignments. Another opportunity for reflective observation is the final presentation, during which students share their accomplishments with the rest of the class and discuss their pivotal learning moments, as well as lessons learned.

The last two phases of Kolb's cycle, abstract conceptualization and active experimentation, typically occur after the completion of the course, although some level of abstract conceptualization could also take place during the final weeks of the course following the reflective observation. The fourth phase, active experimentation, focuses on students' ability to apply the skills learned in the course to new situations and settings that most often occur in new courses or experiences after the service-based learning course has been formally concluded.

2.3.3 Benefits. Service learning creates opportunities for students to apply classroom learning to real-world experiences that benefit the community. In essence, all constituents receive benefits. The institution and faculty providing the learning experience get to promote their involvement in community projects and demonstrate ability to facilitate a high level of learning experience that students need and desire. In addition, an improved course curriculum is obtained with the potential to utilize the curriculum as a template for future course development.

The organization that provides the platform or project to be worked on receives insight, skills, and labor from the students or project team. The completed project provides the desired outcomes needed to support the community's objectives. This is seen in the agile software development project put together by Robinson and Hall (2018). In this initiative, three teams of students were assigned to community projects. Using the agile development methodology, the teams worked in partnership with their assigned community project partner from requirements gathering to delivery. Another example is the web-based system project by Preiser-Houy and Navarrete (2006). This project entailed students developing a website for an elementary school second grade class. The students developed and delivered the website along with supporting materials, including the training documentation and the site documentation manual. These are just two examples of a small but growing list of successful service-based projects and case studies.

The greatest benefits are to the students who gain real hands-on experience that can be transferred to real-world

working conditions, helping achieve employment while also gaining course credit. Additionally, through service-based learning, students increase personal tolerance, personal efficacy, leadership skills, communication skills, career skills, problem identification skills, resolution skills, action-consequence sensitivity, as well as sensitivity to policy, social justice, and politics (Hoxmeier & Lenk, 2003).

In this paper, we propose a service-based learning course that encompasses both soft and interdisciplinary skills to allow students from various majors to collaborate and work not only on creating digital solutions but also on honing their soft skills, such as communication, teamwork, and interdisciplinary acumen.

3. METHODOLOGY

3.1 GetVirtual Organization

For our course, we used a service-based learning framework founded by the GetVirtual Organization, which is a nonprofit established in 2020. The main purpose of GetVirtual is to help businesses affected by the COVID-19 pandemic pivot their business online. The program pairs local businesses looking for help with college students hoping to gain real-life experience. Businesses receive free help from college students, and in return, students receive experience and college credit for their time. The third component of the program is the community that lies at the center of its mission. In just a year and a half, the organization helped over 100 businesses, expanded to six universities, and enlisted approximately 200 GetVirtual student members. The noble mission of this organization and the universal methodology of this program can be quickly adopted by any university.

3.2 GetVirtual Program

The GetVirtual program offers an innovative curriculum that includes comprehensive methodology and resources for faculty, student tools, and client tools. The methodology consists of several well-defined steps to guide students and faculty through the entire service-based learning process (detailed information about the methodology is provided in the subsequent section), along with course resources such as a course checklist, sample syllabus, and templates. Student tools include digital resources to help students manage their projects and maintain open communication with their classmates, the GetVirtual organization, and the GetVirtual student community. Examples of student tools include Google Drive, Slack, Trello, Discord, and ClickUp. Client tools refer to predefined services offered to clients. These include the following three main categories.

- Website development (using Wix, Squarespace, or third party plug-ins)
- E-commerce (using Shopify or Amazon)
- Digital marketing (search engine optimization, search engine marketing, email marketing, social media marketing, and Google Analytics)

Students and faculty are provided with online materials, videos, and case studies, all of which are housed on the GetVirtual Resource Hub website (GetVirtual, 2021). Shadowing opportunities and vendor-live trainings can also be arranged. The biggest difference between the GetVirtual program and traditional service-based learning courses is that GetVirtual is not tied to a particular business domain. It serves

as an interdisciplinary platform for students from different disciplines to join forces and converge on the best solutions for their clients. Furthermore, it creates a community of students from within an institution as well as a network between multiple universities. The GetVirtual program can be used as an independent study or course. In this paper, we discuss the GetVirtual framework as applied to a formal course setting.

3.3 GetVirtual Methodology

The process begins when a client signs up for the GetVirtual service. One of the GetVirtual student co-founder(s) reviews the request and assigns a contact person called a project manager. The project manager can be a student from the GetVirtual chapter located in the same geographic region as the client, or if the local chapter is at full capacity, the client could be assigned to another chapter that has availability yet is located in a different region. All of the work is conducted remotely, which allows flexibility for students and clients to work together, irrespective of their physical proximity. The project manager then reaches out to the client to conduct an intake interview. To help students with the interview, an intake interview template can be utilized. This template contains a basic script to help students start a conversation with the client, followed by a list of important questions to ask the client about their business. After the intake interview is completed, the GetVirtual students summarize the findings and share the intake interview notes with the class. The class reviews each request and ranks it based on four criteria: project scope, bandwidth, skill set, and alignment with the GetVirtual mission. Project scope refers to the match between the client's request and the list of services offered by the GetVirtual organization. Bandwidth refers to the current capacity available to GetVirtual students to undertake the project. Skill set refers to the appropriate know-how and expertise to complete the client's request. Finally, the alignment with the GetVirtual mission encompasses the evaluation of the business type to assess whether it is a nonprofit, small for-profit, or new startup. Once the request is assessed based on the four criteria, and determined to be a match, the project is accepted. If the project is a match but the current bandwidth is limited, the project is waitlisted. Otherwise, the project is rejected. In any case, the client is immediately notified of the decision of the GetVirtual team. When a project is accepted, a new, well-defined workflow begins. First, a project team is formed. Next, the team determines the need for a diagnostic interview. This interview can be held if the project scope needs to be clarified or if additional information about the project is needed before the proposal can be drafted. Once information is collected, a written proposal is composed by the team. The proposal includes several sections that explain the client's needs or problems, scope of the project, resources required to complete the project, timelines, as well as collaboration agreements. This proposal is then shared with the client at a kickoff meeting, where the client and the project team meet to go over the proposal that states the deliverables and terms of collaboration. Often, the proposal must be adjusted based on the client's feedback. The team then modifies the proposal and sends it back to the client for the final review. Once the proposal is accepted or signed off by the client, the project team begins its work. Similar to the previous steps, the proposed document contains a template available to all students, along with case studies and examples of prior student work.

Next, the project work begins, and students work together with oversight from the faculty but take on the lead role in the project independently. The project work includes weekly meetings with the client to review the progress of the work completed thus far and receive feedback. This frequent feedback helps students stay on track to meet their client's needs and allows the client to be informed of where the project is at each step of the process. Students follow the timelines agreed upon in the proposal for project work, as well as the final delivery date.

Project closeout occurs when the final solution is delivered to the client, also called a project launch. This goes along with knowledge transfer materials such as in-person training, training documents, or videos, so that the client can maintain the solution going forward. At that stage, the feedback request is also initiated, where clients have the opportunity to provide their testimonials.

A pictorial representation of the methodology is included in Appendix A. Any reader interested in adopting the GetVirtual program is encouraged to visit the Quick Start Guide located in Appendix B.

4. COURSE STRUCTURE

4.1 Learning Goals

The main objective of this course was to provide students with opportunities to improve their soft and hard skills in an applied and interdisciplinary setting. The key student learning goals for this course, adapted from the GetVirtual program, consisted of the following:

- Develop proficiency in project management methodology.
- Assess client's business needs and propose appropriate and innovative digital solutions.
- Produce comprehensive proposal documents.
- Develop and implement the agreed upon digital solutions.
- Directly interact with clients utilizing best practices for professional oral and written communication.
- Establish a collaborative teamwork environment and effective team management practices.

As discussed earlier, soft skills include, but are not limited to, written and verbal communication, teamwork, problem-solving/critical thinking, professionalism, flexibility, leadership, diversity awareness and sensitivity, and decision-making (Stewart et al., 2016). The above student learning goals capture many facets of the soft skills construct, with emphasis on written and verbal communication, problem-solving, critical thinking, and teamwork. The next section discusses student grading and evaluation criteria in the course.

4.2 Student Evaluation

The overall student grade in the course was calculated based on a grading schema adapted from the GetVirtual program. The grading categories included class attendance and participation, completion of written documents and practice assignments, execution of client projects, self-reflection and evaluation, peer evaluation, and final presentation. The largest weight was assigned to the execution of the client project category.

The instructor assessed the students' project work, including ongoing feedback from the client. The grade for the execution of client projects was based on the following criteria.

- Timely and effective communication with clients, peers, and the instructor (maximum of 48 hours).
- The weekly project status update meetings with the client to review work progress and seek feedback.
- Meeting project deadlines and milestones as defined in the proposal document.
- Equally contributing to the overall project by successfully completing assigned tasks, researching work/solutions, being proactive, and exercising strong problem-solving within the team setting.
- Always adhering to professional written and verbal communication.

During the project execution phase, the teams shared the status of their projects in class each week, and individually discussed what they were working on. The teams also provided the overall status of the project each week using a traffic light system (green, yellow, and red). In addition, the instructor participated in key meetings with the client to assess client satisfaction and to provide support to the students as needed. All grading criteria can be modified and configured differently at each university's discretion and based on the university's learning goals.

4.3 Course Outline

Our fifteen-week course consisted of three modules: a bootcamp, project work, and project close-out. The bootcamp module was designed for the first five weeks of the course, during which students were introduced to GetVirtual methodology, resources, student tools, and client tools. The next module was designed for seven weeks and entailed project work. This is where students interviewed the clients, wrote proposals, and executed the solution. The last three weeks of the course focused on project close-out. During this time, students delivered the solution to the client, solicited feedback for the work performed, wrote self-reflections, self and peer evaluations, and conducted final presentations.

In addition to the three modules listed above, the course ran in two parallel tracks. The first track focused on the GetVirtual framework, and the second on enrichment activities. The GetVirtual framework track was the primary focus of the course and consisted of the three modules mentioned above. The enrichment activities track consisted of industry guest speakers, professional workshops, and discussions on topics that directly related to the applied learning in the course. For example, during the bootcamp module, all students completed a predictive index (PI) behavioral assessment. This was a readily available tool at our university that we decided to incorporate into the course. It assessed students' natural drives and needs, and provided results with helpful information about their predicted behaviors, strengths, and effective management strategies. During subsequent class meetings, we invited a guest speaker from the PI organization to discuss the purpose of the assessment and how to interpret the individual results. Subsequently, the students shared their profiles with the rest of the class. This was a great ice-breaker activity and offered an opportunity for students to build self-awareness and learn more about themselves, especially since the course was heavily based on teamwork. Other enrichment activities included guest lectures by business owners and professionals from the local community who presented various topics such as small business ownership, the importance of effective communication, project management principles, personal branding, and resume tips.

This course outline offers flexibility and can be modified (scaled up or down) based on the duration of the semester and other factors.

4.4 Teamwork

The project teams were formed during the project work module after all intake interviews were completed. First, the students signed up to interview at least one client. Multiple students could sign up for one client, but one student volunteered to take on a lead role in conducting and facilitating the intake interview. The students then summarized the intake interviews, including information about the business, its problems or needs, and a desired solution. Upon completion of all intake interviews with all clients, the students shared their findings with the rest of the class. Each potential project was then evaluated based on the four aforementioned criteria set by the GetVirtual organization: project scope, bandwidth, skill set, and alignment with the GetVirtual mission. Once decisions were made to accept the projects, project teams were formed. More specifically, the instructor determined the number of team members required for each project, and students self-selected themselves for the project(s) that they were intrinsically interested in working on based on the skills they were trying to develop. In larger teams (three or more students), one student had an opportunity to take on a project manager role, while the other students played the role of team members. Otherwise, students could choose to co-manage the projects jointly. All teams were self-governed, which allowed students to assume leadership roles, define roles and responsibilities, and establish an environment that was most effective for collaboration among the members of a given team.

5. RESULTS

Overall, our elective GetVirtual course was highly successful. It consisted of students from business information systems, computer science, marketing, management, and accounting. Collectively, the students supported six local businesses. The services they provided ranged from building a brand new seven-page Wix website, creating social media business profiles, completing social media marketing research and strategy, and implementing search engine optimization for Wix and Squarespace websites. On average, each student devoted approximately ten hours per week to the project during the project execution phase. In addition to community service and gaining hands-on experience, students also appreciated the opportunity to hone their soft skills. One of the key skills emphasized by most students in this course was professional communication. This was something that many students experienced for the first time while working with their team members and clients. One student succinctly wrote in their testimonial: *“As a student communication is something that can often be overlooked and something that isn’t developed very thoroughly, as well as collaboration with team members. I believe many students have experiences with group work not going well and being unproductive, but when collaborating on a project that everybody wants to see happen, you start to see the importance of working together as a team and having open lines of communication with both the team and your clients. I have left this course with these skills that will be paramount to success in my future career.”* Prior studies have emphasized the importance of communication skills and the high value placed

on oral, written, and interpersonal communication by employers (Crews & McCannon, 2000; Musa et al., 2012; Stewart et al., 2016).

Another important skill emphasized by the students was real-life project experience. One student shared: *“Originally I was unsure of how this class would go because most classes would assign reading with homework and exams in between, and GetVirtual exceeds my expectations in this aspect because I learned far more doing the hands-on work in this class than I would have from reading a textbook.”* Another student stated: *“My expectations from the GetVirtual course were high and they were absolutely met, if not exceeded... This course was a non-intimidating step into the business world and my first real experience working with clients. I learned so many skills that I feel I can apply to all aspects of my life, including communication skills, customer service relations, team collaboration, project management, proposal writing, conducting interviews, just to name a few.”*

In addition, students enjoyed learning about small business ownership and business domains outside of their specific concentration or area of study. They developed an appreciation and understanding of various business models and how these building blocks must work in harmony for the business to operate successfully. This gave students the opportunity to increase their interdisciplinary acumen and broaden their overall business knowledge.

Finally, the mean course evaluation score was 4.7/5.0. This metric validated teaching effectiveness using the GetVirtual methodology as well as overall student satisfaction with the course. This further confirmed that students appreciated and valued the interdisciplinary focus with hands-on, real-life problem-solving opportunities meant to further prepare them for their careers. Coupled with student testimonials and feedback, this course evaluation also demonstrated that students enjoyed making an impact and helping their local communities.

6. LESSONS LEARNED AND FUTURE OPPORTUNITIES

From the course preparation perspective, and given that this was a brand new course, we suggest creating student and client flyers to spread the word about this program and recruit both parties, students, and clients to participate. Our student flyer included information about the course, its benefits to students, the prerequisites, times and days of meetings, and instructor contact information for further questions. Similarly, a client flyer included information about the benefits of this program to the local businesses, a list of services offered, timelines of the engagement, a sign-up link, and instructor contact information for any questions. Both flyers were published on the school’s social media pages. Additionally, the client flyer was shared with local chambers of commerce.

Next, prior to launching this course, we shadowed a GetVirtual course at another university to learn how the course is facilitated and familiarize ourselves with the methodology. This shadowing experience was invaluable for our preparation and overall success. Although faculty can still reach out to other GetVirtual course instructors for information and possible shadowing opportunities, we feel that this paper can serve as a direct alternative to observing another course. In addition, we were able to employ a teaching assistant, a GetVirtual student who had previously completed this course. The teaching

assistant was a great asset to the course. The assistant helped prepare training materials for GetVirtual student and client tools, held weekly peer hours for students, and was involved in every aspect of the project work. This included assisting students with project tasks, attending client meetings, providing coaching and feedback, and advising on the most appropriate solutions for the clients based on the GetVirtual framework.

Moreover, we strongly encourage faculty to take advantage of the GetVirtual Resource Hub that contains information regarding course setup, curriculum introduction, example syllabus, GetVirtual course checklist, as well as information about the methodology, case studies, and training videos for student and client tools. This great online resource allows for quick onboarding of both students and faculty and offers ongoing support throughout the course (for a quick start guide on how to adopt the GetVirtual program, please refer to Appendix B; for the GetVirtual Curriculum Outline, check out Appendix C).

From the course curriculum and teaching perspective, one of the early challenges for students in the course was oral and written business communication with clients. The students were nervous when approaching clients and carrying out ongoing communication. We believe that the lack of prior experience in this area contributed to the steeper learning curve for students. As a result, one opportunity to help students with this challenge would be to increase the communication topic as part of the bootcamp module or one of the enrichment activities. This additional training could include required mock client interviews as well as an overview of best practices for general business verbal and written communication. This could range from setting up an email signature, specifying clear email subject, and composing professional messages utilizing proper diction. In addition, workshops on setting up calendar meetings and preparing for running and documenting meeting minutes might be beneficial. Likewise, reviewing etiquette on video conferencing could help students feel more at ease while conducting effective live meetings with clients.

Another topic that might be of great interest to students is time management. Such strategies would help students plan and organize their project work throughout the course. One example that could be utilized in the class is having students maintain a weekly work journal by setting goals for each week and then in subsequent journals discussing what they were able to accomplish versus what is outstanding and needs to be carried over to the current week. This is similar to generating a “to-do” list to help students organize and prioritize their work. Helping them establish a clear understanding of what they need to accomplish each week to stay on track would contribute to their overall success.

Next, we feel that providing students with the opportunity to work on two or more projects simultaneously (time permitting) would elevate their experience by providing additional opportunities for group work and, as a result, enhance collaboration, cooperation, and the ability to learn new and different skills, as well as to apply the concepts learned from the first project to new situations. Likewise, providing more opportunities for in-class work would help students interact with their groups while receiving instantaneous feedback or help from faculty.

Additionally, we recommend the use of client tools such as the ClickUp Workflow Management tool to automate the GetVirtual workflow process and increase transparency with

the GetVirtual organization and the projects being worked on. This will also streamline work and increase communication among all the entities. It might also be helpful for universities to hire a GetVirtual Chapter Lead to act as a liaison between the university and the GetVirtual organization. Furthermore, this student position could play a dual role of the chapter lead and the teaching assistant.

Finally, we strongly encourage faculty members to utilize transformational leadership (Bass, 1999) by focusing on intrinsic motivation and emphasis on the greater good. Transformational leadership, which includes charisma, inspiration, intellectual stimulation, and exceeding expectations performance dimensions, has been shown to be an effective strategy in education to motivate and inspire students in the classroom (Bolkan & Goodboy, 2009). Coaching, mentoring, and supporting students based on their interests and project needs are also strongly advised. Transformational leadership is especially important in motivating and supporting students to exceed their expectations.

7. DISCUSSION AND CONCLUSION

This study provides three contributions: an overview of the GetVirtual framework, evidence of the efficacy of the service-based learning curriculum, and lessons learned from our experience. First, we provide an overview of the GetVirtual methodology, which can be easily adapted by any university interested in offering such a course. We also highlight that the GetVirtual program can be offered as an interdisciplinary platform where students from various disciplines can partner to create real-life business solutions by leveraging and sharing expertise from their respective academic programs. Based on employers' demands, the need for soft skills, and interdisciplinary acumen, we recommend that such a course be offered to IS students at some point during their studies. This can be offered as an alternative or prerequisite to a capstone course. In addition, it can serve as a stepping stone for students seeking internships, as it provides supervised learning experiences in a real-world setting. Finally, the GetVirtual program can be customized to the students' backgrounds and university needs.

Second, this study provides supporting evidence for service learning theories in terms of benefits to students. Using qualitative data from student testimonials and self-reflections, it is evident that undergraduates have the opportunity to utilize professional communication, gain hands-on experience along with new hard skills, and develop an interdisciplinary perspective of various business domains and models. Additionally, the GetVirtual program offers access to a network of GetVirtual students, faculty, and businesses working together towards a common goal. This community allows members to share experiences, insights, and provide support to one another. Knowledge sharing is a powerful communication system that allows faculties to quickly adapt the framework at their own university. It further unites students, faculty, and businesses and makes everyone feel supported.

Third, by sharing the process we utilized to successfully launch the GetVirtual course at our university, putting together a quick start guide, and listing the lessons learned from our experience, this paper serves as a guide to help other universities run this course effectively for the first time. A successful experience from the beginning will create a better

experience for the faculty and students and set a great precedent for subsequent sections offered in the future. In return, it provides effective service-based learning opportunities to students and their communities.

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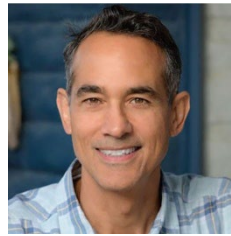
differences. In addition to her academic experience, Dr. Toskin has fifteen years of professional industry experience in information technology from top Fortune 500 companies. She has published in journals such as *Journal of Computer Information Systems*, *Information Systems Education Journal*, and *International Business: Research, Teaching, and Practice*.

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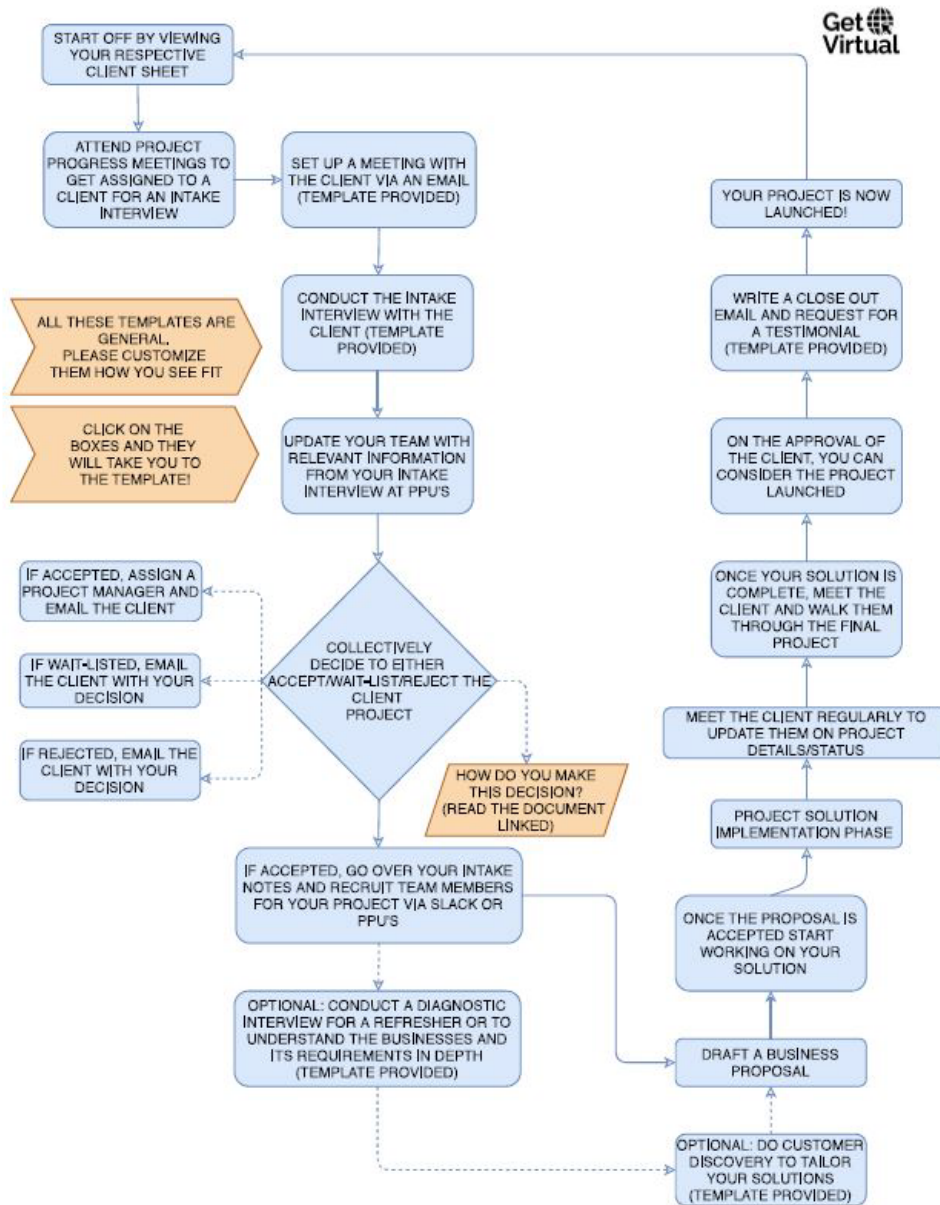
Toby Corey is the COO at Cruz Foam, a company that developed a highly-scalable compostable foam in the \$20b protective packaging market. Corey teaches Entrepreneurship at Stanford University since 2011. Corey is a former president of leaders in clean energy services with an IPO and successful Tesla merger. Corey was also the co-founder and



President/COO of worldwide leaders in web development. Corey sat on the boards at GetVirtual.org, Palmetto Solar, Non-profits WildlifeDirect with Dr. Richard Leakey, and Santa Cruz Works, Buoy Labs, Advanced Micro Grid Solutions, TravelScape, NBX sports, USWeb, iGeneration, Electron Economy, Intend Change Buoy, Advanced Microgrid Solutions, WildLifeDirect.

APPENDICES

Appendix A. GetVirtual Methodology



Source: GetVirtual Resources, <https://drive.google.com/file/d/1dCxiz-mF6OIJ3j8F1UAtvsWSJSj3YD6s/view>

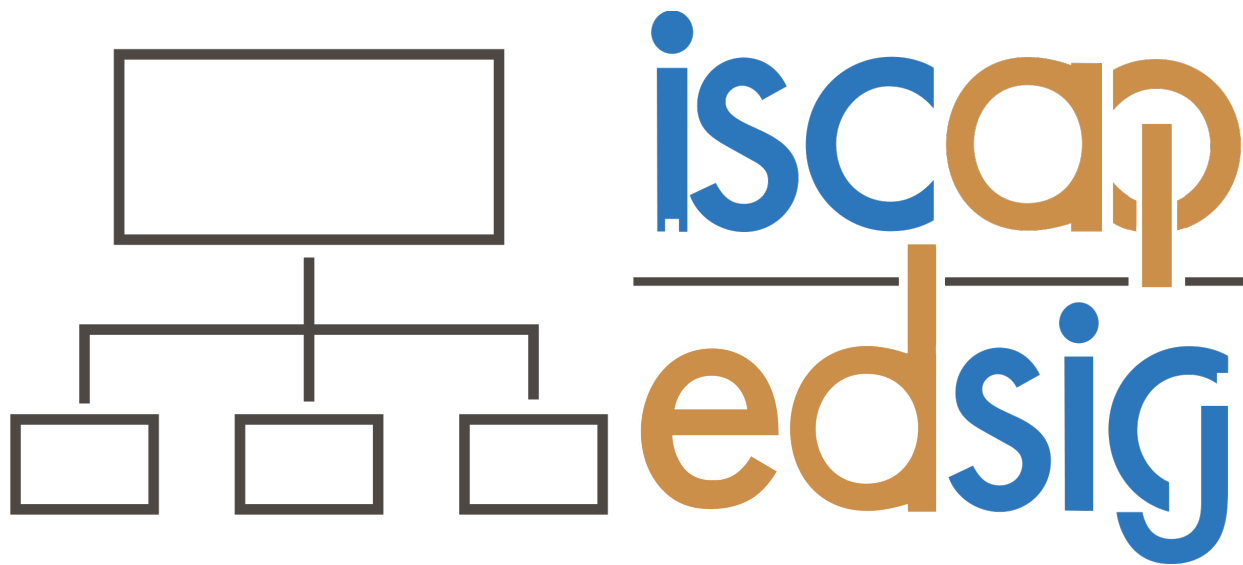
Appendix B. Quick Start Guide (on how to adopt the GetVirtual program)

1. Visit www.getvirtual.org and click on the Partners tab.
2. In the “We Rise Together” section, select “Click to learn more” link to request access to a turnkey “GV Program-in-a-Box.”
3. A GetVirtual (GV) member will contact you with access to the “GV Program-in-a-Box” Repository.
4. Copy the GV program materials to local or cloud storage of your choice. Please refer to Appendix C for an outline of the GetVirtual Curriculum.
5. Review available GV resources and modify the curriculum as needed to fit the needs of the course.
6. Have businesses (local, nonprofit, and impact startup small businesses) register for the program through the GetVirtual website at <https://www.getvirtual.org/sign-up>.

Appendix C. GetVirtual Curriculum Outline

ROLES	COURSES	NOTES	DURATION	
PROJECT MANAGERS	Methodology	Watch videos and go through documents	60 minutes	
	Student tools	If you are not familiar with the tools we use, please watch these tutorial videos for Trello, Zoom and Slack	15 minutes	
	Client tools (Choose which areas you want to specialize and go through the course)	WIX		23 minutes
		SquareSpace		37 minutes
		Calendly		5 minutes
		Shopify		90 minutes
		Amazon (Partnering)		22 minutes
		Instagram (Social Media Marketing)		20 minutes
		Facebook (Social Media Marketing)		20 minutes`
		Connecting Instagram and Facebook (Social Media Marketing)		4 minutes
		SEO & SEM & Google Analytics		20 minutes + 15 minutes + 40 minutes
		Newsletters: MailChimp		40 minutes
TEAM MEMBERS	Student tools	If you are not familiar with the tools we use, please watch these tutorial videos for Trello, Zoom and Slack	15 minutes	
	Client tools (Choose which areas you want to specialize and go through the course)	WIX		23 minutes
		SquareSpace		37 minutes
		Calendly		5 minutes
		Shopify		90 minutes
		Amazon (Partnering)		22 minutes
		Instagram (Social Media Marketing)		20 minutes
		Facebook (Social Media Marketing)		20 minutes`
		Connecting Instagram and Facebook (Social Media Marketing)		4 minutes
		SEO & SEM & Google Analytics		20 minutes + 15 minutes + 40 minutes
		Newsletters: MailChimp		40 minutes
	SERVICE LEARNERS	Student tools	If you are not familiar with the tools we use, please watch these tutorial videos for Trello, Zoom and Slack	15 minutes
Client tools (Choose which areas you want to specialize and go through the course)		WIX		23 minutes
		Instagram (Social Media Marketing)		20 minutes
		Facebook (Social Media Marketing)		20 minutes`
		Connecting Instagram and Facebook (Social Media Marketing)		4 minutes

Source: "GV Program-in-a-Box," <https://www.getvirtual.org/partners>



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ISSN: 2574-3872 (Online) 1055-3096 (Print)