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Abstract:

Numerous studies have highlighted the importance of relational and professional competencies for the information systems (IS) profession. Preparing IS students to be ready for their profession requires the development of competencies that are not often part of the standard disciplinary curriculum. Yet dedicating an entire course to professionalism can be a challenge due to resource and curriculum requirement constraints. In this paper, we describe a pilot project for a "Professional Readiness" program that was designed and implemented to provide an extracurricular resource for undergraduate students. We provide evidence of the program's effectiveness, as well as lessons learned for developing and refining Professional Readiness programs for IS students.

Keywords: Curriculum, Professionalism, Workplace competencies, Career Preparation

I. INTRODUCTION

Numerous studies have highlighted the importance of relational and professional competencies for information systems (IS) professionals (e.g., Aasheim et al., 2009; Burns et al., 2018; Hagen and Bouchard, 2016; Venter, 2019). Indeed, some surveys have found that these competencies are perceived by IS professionals to be even more critical than technical skills (e.g., Aasheim et al, 2012; Kappelman et al, 2016). For example, a survey conducted by Aasheim et al., 2012 asked respondents to rate 48 technical, relational, and professional competencies. None of the top twelve rated competencies were technical. Instead, all of the top-rated competencies focused on the areas of professionalism, communication, and interpersonal relations. To prepare IS students for the workplace, it is important for IS programs to supplement their curriculum with opportunities for students to develop these types of competencies.

While such competencies are often referred to as "soft skills," for purposes of this manuscript we will refer to these competencies using the acronym proposed by Parlamis and Monnot (2019): CORE (Competence in Organizational and Relational Effectiveness). The CORE acronym emphasizes the fundamental value of relational and professional competencies for those in the workplace and does not carry the pejorative baggage that may be associated with the word "soft."

The importance of the CORE types of competencies has been highlighted in prominent IS and computing curriculum initiatives such as MSIS (Topi, 2019) and CC2020 (ACM and IEEE, 2020; Topi, 2017). In addition, business and computing college accreditation organizations have emphasized the value of the CORE competencies. For example, a recent AACSB publication has noted the importance of professionalism within the business curriculum (e.g., Beitelspacher, Crittenden and Sosnowski, 2018) and ABET accreditation for computing programs requires documented student outcomes related to communication, professional responsibilities, and team work (ABET, 2020). Also, college career placement organizations have stressed the significance of CORE competencies. For instance, the National Association of Colleges and Employers (NACE Staff, 2018) has asserted that college students would benefit from more professional readiness preparation prior to graduation to help with the transition to their post-graduation careers.

At our institution we have designed and implemented an extracurricular pilot program to help students to enhance their "professional readiness." When we were working on the pilot project, it was a difficult to find information and guidance regarding how to develop such a program. The purpose of this manuscript is to summarize the development of a pilot program focused on CORE competencies and share the insights we have gained. We begin by defining professionalism and "professional readiness," followed by a discussion of the organizational context, how the pilot program was designed, the components of the program, and student feedback. We conclude with a summary of lessons learned and suggestions for ways that the program can be supplemented to address the specific needs of IS students.

II. DEFINING PROFESSIONALISM AND "PROFESSIONAL READINESS"

The definition of professionalism and what professional behavior means is critical to designing a program that effectively helps students develop their professional identity. For our purposes, we use the definition of professionalism outlined by Trank and Rynes (2003). They define professionalism as having three components. The first component we define as understanding the "membership rules" of being a professional (Wresch and Pondell, 2015). These membership rules are important guidelines for students in understanding their own identity as a business professional, both as they are learning and developing in college, and once they graduate and start their professional business career (Wresch and Pondell, 2015).

The second component of professionalism is an understanding of the ideological and ethical expectations within the profession (Trank and Rynes, 2003). As an aspect of professionalism, these expectations go beyond just personal self-interest to the "broader goals and ideals" of the business profession (Trank and Rynes, 2003, p. 191). Some IS programs in business schools integrate ethics throughout the curriculum, perhaps having one course that provides a theoretical framework from which to view disciplinary learning as it relates to broader ethical ideals within business practice (Schaefer, 1984).

The third component of professionalism relates to the disciplinary knowledge gained in the business curriculum. However, the knowledge itself is less important than the "abstracting ability" developed through critical analysis of the knowledge learned (Abbott, 1988). In other words, while knowledge can become stale or obsolete, the ability to think critically about such knowledge helps to advance practice through creative and innovative advancements.

IS programs often focus on the third component of professionalism, which is disciplinary knowledge. The emphasis on the second component – professional ethics – varies across IS and business programs. Some programs work hard to integrate ethics into the curriculum, while others have a more modest commitment (Schaefer, 1984). However, successfully addressing the first component – the CORE competencies which underlie the membership rules – is often a challenge for IS programs. We believe that preparing students to be professionals – making sure they are "professionally ready" – means addressing the membership rules of the business profession. In the following sections we discuss the development and evaluation of a professional readiness program at our institution.

III. ORGANIZATIONAL CONTEXT

The pilot program in Professional Readiness was developed for students in the College of Business and Economics at a regional comprehensive university in the western United States. The focus of the College is on undergraduate students. While explicit data regarding the professional experience of the students' parents is not available, 35% of the students have reported that they are the first in their family to attend college, while 24% are eligible for the US Pell Grant university program to support lower income families (an indicator that total family income may be less than $50,000). With regard to diversity, 68% of the students identify as White, 14% as Asian, and 18% as a person of color (e.g., Hispanic, Black, Native American). 59% of the students identify as male and 41% as female.

The resources for career preparation and placement at our institution are very limited. While our university has a Career Services Center, there are only six advisors to cover the entire campus of 15,000 students. The business college does not have a career placement office. Although there are not many formal resources for career services and professional development in our college, we do have an active and dedicated business Advisory Council comprised of members who are willing to help support the college and its students. The Advisory Council members represent a variety of professions including information systems, accounting, finance, and marketing.

With regard to curriculum, all undergraduate IS students are required to compete a set of courses in "core" business disciplines including areas such as accounting, economics, finance, information systems, marketing, management, and business ethics. In addition, each student takes seven discipline-based courses focusing on their specific business "concentration" area of information systems (IS). There has been discussion in the College about supplementing the business "core" and discipline "concentration" coursework with a required dedicated course on professionalism (e.g., Clark, Amer, and Ng, 2014). Many faculty members have agreed that a course concerning professionalism would be useful. However, due to curriculum and budget constraints, it has proven to be a challenge to devise an approach to implement any courses which focus on professionalism and the CORE competencies. To deal with this situation, we decided to create an extracurricular pilot program for students focused on developing "Professional Readiness" skills.

IV. PROGRAM DESIGN, COMPONENTS, AND IMPLEMENTATION

To supplement our academic curriculum, we embarked on a project to create a voluntary extracurricular "Professional Readiness" pilot program. The objective of the program was to provide students with opportunities to learn about professionalism and develop CORE competencies over the span of the academic year. The project was initiated and coordinated by an IS faculty member. During the early stages of program development, it became evident that the learning components of the program would be worthwhile for all business students in the college. Hence, the program was designed to address the CORE foundations and be available for all business students. The following subsections summarize of the design of the pilot program, the program components, and implementation.

Program Design

As a starting point, the relevant literature regarding the topics of professionalism and career preparation were consulted (e.g., Litchfield, Frawley and Nettleton, 2010; Succi and Canovi, 2019; Taylor, 2016; Wahr and Venkatraman, 2017; Winberg et al., 2020). Other college programs that had a program focused on professional readiness were identified, reviewed, and consulted (e.g., University of Northern Iowa, University of Arizona, University of Washington). In addition, we examined the pedagogical literature concerning professional skills to gain insights into the most effective ways to help students learn such skills (e.g., Kumar and Bhandarker, 2017; Spanjaard, D., T. Hall, and N. Stegemann (2018); Wurdinger and Rudolph, 2009). A key finding from this exploratory phase was that an experiential-based program would be most helpful for our students. It became clear that it would be critical to enlist the participation of our college's Advisory Council members.

The "Professional Readiness" program was designed with the active support and participation of our college's industry Advisory Council. Based on discussions with the Advisory Council, a framework for the planning and development of the program were established. The framework is summarized in Table 1 and lists the guiding principles that informed the design of the program. Key design issues included: focusing on high priority professional skills (as established by the advisory board), offering three 1-1.5 hour learning workshops each quarter (our institution is on the quarter system), incorporating experiential learning experiences into the workshops, offering opportunities for students to be pushed out of their comfort zone, and coordinating activities with the campus Career Center (e.g., Career Fair events). In addition, the framework enabled us to develop a shared sense of purpose and values with the business Advisory Council members. This

was critical, as many of the Advisory Council ultimately played a key role as workshop leaders and/or participants for the program.

Table 1: Professional Readiness Program - Framework for Program Planning & Development

Program Characteristic	Comments
Content	Focus on high priority CORE competencies that will enhance "professional readiness."
Role of business professional	Enlist business professionals to play a central role in the program – the professionals will offer knowledge, insights, inspiration, and credibility.
Student audience	Target the program to all undergraduate business students – program will be voluntary (not for credit).
Frequency	Offer approximately three "learning modules" each academic quarter (generally delivered on a weekday evening).
Length	Design each learning module session to be about 1-1.5 hour.
Learning model	Adopt a "LEAP" model for student learning: • <u>Learn</u> a new skill/concept during learning module session • <u>Experience</u> doing the skill during learning module session • <u>Apply</u> using the skill after the session in a "real world" setting (e.g., Career Fair, job search, part-time job, student club activity, class) • <u>Practice</u> using the skill after the session
Push on the comfort zones	It is OK to push students a bit out of their comfort zone – but still try to provide a supportive environment to allow them to learn, experiment, and grow.
Coordination	If appropriate, coordinate timing and/or content of learning modules to enable students to readily apply their new skills via existing campus events, activities, and/or resources (e.g., Career Services Center offerings).
Leverage partnerships	Develop partnerships with college stakeholders and related support networks to leverage existing resources and promote the program. e.g., Career Services Center, student clubs, faculty, advisory boards.
Year-end reward	Encourage students to participate in multiple activities by offering a certificate/end-of-year recognition event.
Assessment	Gather feedback from program participants to assess effectiveness.
Make an impact	Help students along the pathway to future success!

Program Components

To decide on the most appropriate learning components for the program we consulted with members of our college's Advisory Council, our Career Services Center, industry recruiters, and student leaders. Following a series of discussions, the pilot program was designed to include ten activities over the academic year. The ten activities for the pilot program are summarized in Tables 2, 3, and 4. As indicated in the tables, the activities were sequenced such that the workshops held during the first half of the academic year focused on the more fundamental CORE types of topics (e.g., professionalism, job search tips, networking, dining etiquette), while the workshops during the second half of the year focused on more advanced topics (e.g., business communications, negotiations, workplace survival tips). At the end of the academic year, those students who had participated in at least half of the workshops were invited to attend a dinner with business professionals and receive a certificate.

Table 2: Professional Readiness Activities for Fall Quarter

Activity	Overview	Experiential /Skills Component	Additional Comments
Fall Quarter			
Professionalism: Survival Tips from the Pros	Session began with a panel discussion of three professionals who discussed their perspectives on what professionalism means in the workplace. Panel was followed with an interactive "meet and greet" networking session in which students interacted with the business professionals and practiced related skills that had been discussed during the panel. Concluded with a debrief and Q&A.	Each student had an opportunity to meet and greet several business professionals in a networking type of setting, exchange mock business cards (which were provided to students at the workshop), and practice interaction skills (hand shake, eye contact).	Student leaders moderated the panel discussion with the business professionals; A dozen business professionals (including several from the IS field) participated in the meet and greet portion of the workshop and the Q&A. Event was scheduled on same day that the Advisory Council was on campus for a quarterly meeting.
Reaching Out for Business Success and Taking Risks	Each Techniques that a student may use to move out of their comfort zone and "reach out" to establish new professional contacts to support a job search and professional development. As part of the session, the students practiced "reaching out" techniques with business professionals. Concluded with a debrief and Q&A.	Meet with three different business professionals to practice establishing a connection and requesting information (three practice rounds).	Three professionals participated (one as lead, two others assisted with workshop practice session).
Finding a Job -- Insider Tips for a Successful Job Search	Introduced practical tips and skills to increase the chances of having a successful job search (e.g., resume, identifying prospective employers). The session was led by business professionals who had gained much "inside" experience recruiting college students. The session included a role play exercise focusing on strategies on how to interact with a recruiter at a Career Fair. Concluded with a debrief and Q&A.	Role play exercise to engage with a recruiter at a job fair booth (selected students).	Two IS professionals participated and conducted role play; Scheduled the week prior to fall quarter student Career Fair.

Table 3: Professional Readiness Activities for Winter Quarter

Activity	Overview	Experiential /Skills Component	Additional Comments
Winter Quarter			
Networking: Connecting for Success	Introduced techniques a student may use to "network" to establish new professional contacts to support the job search and professional development. The techniques discussed included. Concluded with debrief and Q&A.	Groups of students did a "speed networking" type of session in which each student had an opportunity to interact with three different business professionals to practice (and observe) the "30-second introduction" and two types of informational interviews.	Three professionals participated (one as lead, two others assisted with workshop practice session); Scheduled the week prior to winter quarter student Career Fair.
Dining Etiquette Dinner	Fundamentals of dining etiquette learned via a pre-dinner summary lecture and a three-course dining experience with business professionals. (Note: Many of the professionals attending dinner were on campus to recruit at the winter quarter Career Fair the next day.)	Students practiced dining etiquette and networking skills at a dinner with professionals.	This all-campus event was hosted/organized by the university's Career Services Center. Each dining table had 8 seats and ratio of students to professionals was 3:1. Event scheduled the evening prior to winter quarter student Career Fair.
Getting what you're worth... and maybe a little more: Tips for Negotiating a Job Offer	Interactive workshop offered guidelines to help students develop skills that will enhance the ability to negotiate with others. Workshop focused on salary negotiations. Concluded with debrief and Q&A.	A set of role-playing exercises was conducted with a facilitator and several students to illustrate job negotiation techniques.	Facilitator was a management faculty member with academic and professional experience with negotiation theory and practice. Role play exercises were conducted in front of entire group via a "fish bowl" format.

Table 4: Professional Readiness Activities for Spring Quarter

Activity	Overview	Experiential /Skills Component	Additional Comments
Spring Quarter			
Making an Impact with Business Communications	Interactive workshop was designed to provide guidelines for: expressing information in a concise and effective way (e.g., "elevator talk", e-mail), giving/receiving feedback, and making presentations. Concluded with debrief and Q&A.	Students worked with partners to a) prepare and deliver an "elevator talk" concerning each student's academic and work background and b) give/receive feedback on their delivery.	Facilitator was a marketing executive from Microsoft with extensive experience in business communications.
Communication Styles in the Workplace: Tips from the Frontlines	This interactive workshop focused on skills that can enhance a person's ability to communicate and work effectively with others who may have different communications styles. As part of the workshop, each student's communication style was assessed with a survey instrument.	Personal assessment survey completed by students prior to session.	Workshop was designed to help students who would be graduating at end of quarter, as well those who were involved with class team projects. Facilitated by two IS managers from a technology company who had been part of a similar type of workshop at their organization during the previous year. The managers drew on their personal experiences to discuss the value of understanding communication styles.
How to Use Enlightened Self Interest to Stay Sane, Productive, and Amused at Work	Focused on practical suggestions for navigating the workplace and business environment distilled from the session coordinator's 30+ years in industry.	Interactive discussion concerning skills for success in the workplace.	Session was designed for students who would be graduating at end of quarter or doing summer internships. Coordinator had extensive experience as manager and consultant. Participants discussed 13 guidelines for being successful in the workplace. Session incorporated a highly practical, "real world" tone.
Student Recognition Dinner	Students who had participated in three or more of the workshops during the academic year were invited to participate. The multi-course dinner was held at a fine dining restaurant and included the qualifying students and business professionals.	Dine with professionals to practice, refine, and discuss the professional readiness skills learned through the program. Ratio of students to professionals was 1:1.	Scheduled at end of academic year. Most of the professionals who had helped to design or deliver the professional readiness program participated in the dinner. In addition, other professionals who were active supporters of the college attended.

Program Implementation

Since the Professional Readiness program was a new and voluntary extracurricular program, we were not sure how many students would attend the activities. To accommodate the schedules for participating students and the professionals, each workshop was held on a weekday during late afternoon or evening. In addition, we enlisted the participation of the student clubs. Our college includes several active student clubs. As mentioned earlier, the leaders of the student clubs were consulted prior and during the development of the Professional Readiness program. As such, the club leaders felt a sense of ownership of the program and were excited when the program was implemented. Prior to the start of the program, each of the business clubs were invited to have their club serve as co-sponsor of one or more activities. As an activity co-sponsor, a club was asked to include the activity on the club's schedule, promote the activity to their members, and serve as the host/moderators. The club leaders enjoyed hosting the activities and it was evident that having a club co-sponsor an activity helped to bolster attendance.

It should be noted that due to budget constraints, we had limited resources to allocate to the program. Except for the final dinner event, each activity for the pilot program was designed to be low cost. While most events included some form of food and drink (e.g., pizza and soda), the businessperson who was leading the event typically covered the cost. Most of the cost of the final dinner event was sponsored by the business participants, who each paid for their own dinner and sponsored a student. Overall, the annual total cost to the college for the pilot program was approximately $750 US.

V. Program Assessment

Overall, the feedback from students and industry participants regarding the Professional Readiness program was very positive. The feedback is summarized below.

Student Participation and Feedback

As noted earlier, the program was voluntary for students. As indicated in Table 5, the number of students at each workshop ranged from 13 to 52, with a mean of about 30 students at each activity. Slightly more than 200 different students attended at least one of the workshops over the year, including 35 IS majors. As our College of Business had a total of 1,200 majors during the year of the pilot program, this meant that about 17% of the students in the College participated in at least one of the workshop events. Sixteen students attended at least half of the workshops and qualified to be invited to the final dinner (fourteen were able to attend). A simple feedback survey was sent to student participants following eight of the events. As shown in Table 5, the student feedback was typically very positive with that vast majority of students indicating that they "agreed" or "strongly agreed" that each workshop was worthwhile.

The feedback from the open-ended questions on the survey was also very positive, as students indicated that they felt more prepared for the job search process and workplace after doing the workshops. Provided below are example comments:

> "In the professional readiness series, I am continually learning how to approach professionals. This session was a great extension to the initial workshop a couple of weeks ago. During this workshop, the main focus was to go outside of your comfort zone and take a risk. Business and growing yourself as a person is all about taking risks. It is a great way to get your name out there and begin to accumulate a network of connections."

> "The professionalism workshop today was an invaluable opportunity for learning the "insiders" perspective about what it takes to make a good first impression and maintain professional behaviors."

> "There are many things about "professionalism" that I have overlooked until my attendance in the past two Professional Readiness Workshops [on "Survival Tips" and "Reaching Out"]. The first and most valuable take away is the notion of "risk taking". I never thought that a

conversation or parts of it would entail actual risk taking. Just paying attention and learning to raise one's awareness about his/her internal reactions to a situation/conversation is the key to knowing when to 'go for it'. For example, I learned that during a conversation when my stomach turns in to a knot and my adrenaline begins to raise it is time for me to take my risk. These are my internal signals for "risk taking initiation". Without being aware of these feelings and what they could really mean for me, I would usually dismiss them as pure "nervousness"."

"This [Networking] workshop is one that I really enjoyed and had a great time in it. When I went to the meeting, I was really nervous because I didn't know what to expect once I get there. This meeting was a wakeup call for me."

"I learned so much in this workshop. Not only was the informational PowerPoint beneficial in the beginning but the "breakout" sessions was where the learning really happened, where   we   could   apply   what   we   talked   about."

"I think that the professional readiness program is very valuable because it is usually offered at times convenient for most students and the presenters have given valuable information and tips that are applicable to our professional careers."

"Overall, the professional readiness workshops have been great for me! That have reiterated just what I need to be focusing on as I move into the working world. I plan to continue attending them as they occur."

Industry Participant Feedback

The feedback from the industry professionals who served as workshop leaders and participants was also favorable. The professionals were pleased with the content of the program, as well as the attitude and development of the students who participated. Based on their experiences, all professionals who participated in the pilot program offered to help again in the future. Example feedback comments are provided below:

"There are practical and social necessities to a successful career that often aren't taught: CBE has created a Professional Readiness program that takes into account the risk taking, networking, and social preparedness that graduates must also know to succeed."

"These programs are valuable because they allow business persons to engage with students to provide mentoring, advice, and networking abilities."

"I have been very impressed with the students I have worked with."

"[The] students that I've observed are all eager for knowledge, willing to work, and have the ability to work independently; they're conversant and well spoken."

Table 5: Student Participation and Ratings for Professional Readiness Workshops

Activity	No. of Student Participants	No. of Survey Respondents	"Overall the Workshop was Useful" Mean Rating (Scale: 1-5)
Fall Quarter			
• Professionalism: Survival Tips from the Pros	30	11	3.9
• Reaching Out for Business Success and Taking Risks	29	6	4.3
• Finding a Job -- Insider Tips for a Successful Job Search	34	9	4.8
Winter Quarter			
• Networking: Connecting for Success	29	9	4.8
• Dining Etiquette Dinner	52	-	-
• Getting what you're worth... and maybe a little more: Tips for Negotiating a Job Offer	43	9	4.9
Spring Quarter			
• Making an Impact with Business Communications	26	8	4.6
• Communication Styles in the Workplace: Tips from the Frontlines	13	7	4.4
• How to Use Enlightened Self Interest to Stay Sane, Productive, and Amused at Work	20	9	4.4
• Recognition Dinner	14	-	-

Notes:

1. Rating Scale (1-5): 1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree)
2. Surveys were not administered for the Dining Etiquette Dinner or the Recognition Dinner events.

VI. Lessons Learned

Overall, the pilot project for the Professional Readiness program was considered a success. We continue to plan and develop Professional Readiness workshops. Based on our experiences, we gained several insights that may be helpful to others who may be interested in developing a similar type of Professional Readiness program. The key lessons learned are summarized below:

- **Industry involvement is critical for design and implementation**:
    We found that our industry partners provided excellent ideas for our program. Involving industry professionals (including recruiters) with the development of the program can enhance the content and relevance of the program. Also, involving

local industry members will help to ensure that the program's "curriculum" is appropriate for the needs of the regional industry.

- **Industry engagement nurtures relationships and supports accreditation**:
  The industry members who were involved with the design and/or implementation of the program found that their participation was very rewarding. In particular, those who interacted with the students during the activities received immediate gratification. Many students showed notable improvement in their CORE skills between the start and the end of an individual workshop and typically expressed their appreciation to the professionals. As the industry members could see the positive impact of their efforts on our students, we found that the program provided an excellent way to foster positive relationships with our industry partners. Also, based on their enthusiasm, several of the industry members volunteered to sponsor the costs associated with a workshop event. Also, with respect to accreditation purposes (our college is accredited by AACSB), the program provided an excellent way to demonstrate engagement with industry professionals (AACSB, 2020).

- **Program benefited by involving students and professionals from all business areas:**
  As mentioned earlier, the pilot for the Professional Readiness program was designed by an IS faculty member. However, early during the development of the program it was decided to open the program to all business students and enlist support from professionals from all business areas. We found that this approach worked out well, as the program was able to draw from all of the college's industry resources/contacts and the students were exposed to a broader range of perspectives and cross discipline learning. While there are ways that the pilot program can be supplemented with special activities for IS students (see section VIII), there was value to having a more broad-based business perspective for the foundation components of the program.

- **Co-sponsorship of events with student clubs was a win-win:**
  Involving student clubs with event promotion and delivery (e.g., student leaders as facilitators) helped to promote the events, engage students, and encourage participation and attendance. Also, from the perspective of the clubs, creating a rotation of Professional Readiness events throughout the year can provide participating clubs with a strong anchor event(s) for their schedule. In addition, the club leaders and members developed new contacts and skills be serving as co-sponsors and hosts for the Professional Readiness activities.

- **Coordinating with Career Services Center was valuable:**
  As described earlier, we coordinated closely with our university's Career Services Center to schedule program events to help students to prepare for key career placement activities such as job fairs and student recruiting cycles. We also promoted Career Service Center activities to the students. The students found this coordination to be very helpful. Also, the Career Services Center was pleased with the coordination as it helped to increase student engagement in their programs and leverage their activities.

- **Supportive workshop leaders and ice breakers are important:**
  As described earlier, the workshops for the program were very experiential in nature and typically required students to interact with industry professionals and perform role-plays. We observed that some students were very nervous upon starting a workshop. Fortunately, the business professionals who participated in the workshops were understanding and were effective in helping the students to get comfortable. We found that using icebreakers and having supportive industry workshop leaders was a critical success factor. We observed that there could be remarkable

improvement in the way that some students loosened up and relaxed during the time span of a one workshop.

- **Seek student feedback for continuous improvement:**
  Asking students to complete a survey to get feedback on each session can help with continuous improvement. We enhanced participation for the feedback surveys by holding a simple raffle for all who completed the survey (the raffle prize was a gift card to a campus coffee shop). We generated useful survey feedback that helped us to make adjustments to the program to make it more engaging and relevant to student needs.

- **Student participation for first year was solid, but many students did not participate:**
  For a new program, the student participation was solid with an average of about 30 students per event. However, as noted earlier, only about 17% of the students in the college participated in the program (and some of these students only attended 1-2 activities). Based on our observations and the feedback from students who participated, we believe that many more students could benefit from the program. While word of mouth is likely to increase attendance, it may be that a more formal requirement for attendance is needed. One approach to consider may be some form of an extracurricular requirement for participation. This approach has had some success in other programs (Clark, Amer, & Ng, 2014) and could be a strategy to encourage more students to participate.

VIII. ONGOING STEPS: SUPPLEMENTING THE CORE FOR IS STUDENTS

The pilot Professional Readiness program was designed to help students build fundamental CORE competencies. While the program activities were clearly useful for the IS students who participated, the pilot program was not customized for IS students. Since doing the pilot program, we have taken steps to identify additional IS-related workshops and activities to supplement the Professional Readiness program. There are aspects of the IS profession that are somewhat specialized such as job searching for an information systems career, the professional "membership rules" and work culture for an IS organization, and collaborating with others. To help our IS students to get a better sense of how to navigate these aspects of the IS profession, we have invited IS alumni with special expertise in each of these areas to share host special activities for the IS students. The activities included how to prepare a LinkedIn profile for the technology industry, a conversation hour with an accomplished IS project manager from Microsoft, and a workshop on how to set up and use a GitHub repository. These workshops provided an excellent way to supplement the more general Professional Readiness program and were well received and attended by the IS students.

IX. CONCLUSION

It is important to provide IS students with opportunities to develop their CORE competencies and professional readiness as part of their required or extracurricular curriculum. Unfortunately, many students do not get such support and guidance in their disciplinary-focused courses. In addition, many students think that professionalism is "common sense" and that they do not need such preparation. The pilot program described in this manuscript was designed to engage students in activities that they see as relevant and helpful for their career. Developing programs to support student professional readiness is an ongoing effort. As we build on our experiences with the pilot program, we hope to continue to enhance student engagement and see more of our IS graduates achieve their career and life goals.

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