The Role of Higher Education in Developing Durable Skills: Reframing General Education

James Hutson
Lindenwood University

Mark Valenzuela
Lindenwood University

Barbara Hosto-Marti
Lindenwood University

Shannon Wright
Lindenwood University

While market researchers have found that employers desire durable skills (formerly known as "soft skills") and that the Humanities and general education curriculum is best suited to meet this demand, there heretofore have been few studies dedicated to identifying where, when, and how these are introduced and how these outcomes differ from counterparts in other disciplines, such as Business or STEM. This study proposes to investigate the way the Humanities contribute to the development of durable skills and how those approaches might be integrated elsewhere into the curriculum to meet employer needs and ensure future success for college graduates. Results from the study demonstrate the differing perspectives and expectations of students and faculty with regard to developing durable skills. Overall, students believed durable skills, such as teamwork and critical thinking, are developed in major coursework and General Education, while faculty primarily pointed to experiences outside of the classroom to develop and reinforce these skills, including through internships, volunteering, student life- athletics, and student clubs.

Keywords: transferable skills, power skills, durable skills, Humanities, General Education, liberal arts

INTRODUCTION

Higher education has received increased pressure to demonstrate measurable outcomes, directly tied to career competencies. But what has historically made US colleges different than their international counterparts is their liberal arts foundations. Detweiler (2021) recently argued that the pressure students feel to focus on mastering immediately practical, job-specific information overlooks the impact the liberal arts have on lasting, durable, and transferable skills. While college graduates continue to rank job placement among the top motivators for pursuing a degree, there exist two competing strategies: 1) the traditional liberal arts approach that focuses on lifelong value and transferable skills, and 2) vocationally focused

training in job-specific information that leads to more immediate career applicability (Pasion, Dias-Oliveira, Camacho, Morais, and Franco, 2020). These seemingly incompatible approaches have placed increased scrutiny on the value of liberal arts, and the Humanities in particular. The so-called "crisis of the Humanities" has as such been a topic of interest for over three decades now (Hall, 1990; Bérubé and Nelson, eds, 1995; Fish, 2010; Gutting, 2013; Jay, 2014). Economic and political pressure has led to a rethinking of what the Humanities should be. However, recent market research has brought the "crisis" full circle and with the coming changes to work spurred on by automation and artificial intelligence (AI), the most in-demand skills are no longer job-specific but are instead "durable" and "transferable." Students today will be expected to retool, and learn new skills for jobs that do not yet exist (Adler, 1992; Moghaddam, Yurko, Demirkan, Tymann, and Rayes, 2020; Lund, Madgavkar, Manyika, Smit, Ellingrud, Meaney, and Robinson, 2021). Thus, arguably, the most valuable skills and outcomes of a college education will become an open mindset with the neural plasticity to readily adapt to new challenges, and these are associated with a liberal arts education.

Market analysis performed by Esmi (2021) noted that the previous role of institutions of higher education was to maximize academic achievement. However, the need to include "durable skills" has increased as the demand for technical skills has. Regardless of the field or career path, Emsi has identified 100 durable skills within 10 major competencies that transcend technical proficiency or discipline expertise, and will become the most sought-after in the future, including Leadership, Character, Collaboration, Communication, Creativity, Critical Thinking, Metacognition, Mindfulness, Growth Mindset, and Fortitude. NACE (National Association of Colleges and Employers) includes many of the same competencies in their 8 Career Readiness Competencies, which include Career and Self-Development, Leadership, Communication, Professionalism, Critical Thinking, Teamwork, Equity and Inclusion, and Technology. Interestingly, NACE refers to these as Employability Skills. Of the top 20 careers by SOC code at the moment, all current postings have at least two durable skills listed as requirements (Emsi, 2021). The study notes a failure in postsecondary education to meet these goals and provide these necessary skills and calls upon the K-12 curriculum to also be mindful. NACE also confirms faculty resistance to their roles including career preparation in many fields, as well as administrative failure to address institutional shortcomings in this area (Smydra, 2021). Yet, neither Emsi nor NACE identifies where and how these skills can/are attained. Where are these skills embedded throughout an undergraduate's career? Are they in specific disciplines or are they learned through experiential learning or extra-curricular activities?

The contribution of the Humanities and General Education as primarily promoting "soft skills," including empathy, teamwork, and critical thinking, has been reconsidered as of late. The term, Bowen, and Schapiro (2014) argue, "feminizes" the Humanities disciplines and undermines their importance when compared to the "hard skills" provided in other fields, such as STEM. Following the Confusion doctrine of the Rectification of Names, a shift in terminology has occurred to accurately reflect meaning, or as the doctrine states: "things in fact should be made to accord with the implications attached to them by names, the prerequisites for correct living and even efficient government being that all classes of society should accord to what they ought to be" (Steinkraus, 1980). As such, with the latest research on the global economy (Emsi, 2021) emphasizing the need for these skills, a rebranding has occurred in terminology and now they are referred to as "durable," "transferable," "indispensable," and/or "power skills," reflecting their indelible importance for the future of work (Adler, 1992; Madsbjerg, 2017; Khakhalkina, 2018; Weise, 2020; Abd Majid, Hussin, Norman, and Kasavan, 2020; Edmondson and Formica, 2021; Smydra, 2021; Barbuti, Zanni, Russo, and Valentini, 2021).

Liberal arts institutions and practitioners in General Education have touted these so-called "soft skills," as they were previously known, as direct outcomes of a liberal education that included exposure to Philosophy, Literature, History, Languages, and more (Detweiler, 2021). However, there remains scarce evidence and few studies to support the assertion and identify where durable skills are being taught and how these may be highlighted for instructors, students, administrators, and future employers. This study seeks to identify where, how, and when soft/durable/power skills are introduced, developed, and reinforced. Faculty and students were surveyed for patterns and experiences in developing durable skills in seven categories that align with NACE, major Emsi competencies, and the University's graduate attributes,

including Critical thinking and problem-solving; Teamwork and professionalism; Leadership; Career and self-development (life-long learning); Oral and written communication; Equity and inclusion; and Information literacy, quantitative and analytic analysis. Special attention was paid to where and how durable skills were developed in curricular, co-curricular, and/or extra-curricular activities while attending college. Results from the study indicate the rich array of opportunities students have in their educational environment to further refine these transferable skills that are highly desirable among employers. Out of ten possible choices, faculty and students identified at least four areas where several durable skills were developed most frequently (more than 50% of the choices), and both groups acknowledged the different ways in which these could be engaged with. However, even though the rank order of General Education was similar between groups, the disparity in overall respondents in the selection of each area developed varied widely. For instance, students found durable skills developed in class, more often than faculty. Faculty, more aware of the potential benefits of engaged and experiential learning practices outside of the classroom, thus more frequently identified durable skills outside of the classroom than did students. Students saw classroom activities often as equally or more impactful in developing durable skills than extra or co-curricular activities.

LITERATURE REVIEW

Previous studies on the role of the Humanities and Social Sciences have focused on their contributions to the physical sciences, such as engineering. For instance, Donald, Lachapelle, Sasso, Gonzales-Morales, Augusto, and McIsaac note that non-technical or "soft skills" in the Canadian engineering curriculum are necessary to instill ethical decision-making and communication skills into students through the development of "social competency, ethical awareness and the ability to express themselves with ease, both orally and in writing" (p.1, 2017). Since the 1940s, the humanities (and later the social sciences) have been seen as a means to prevent over-specialization, enhance creativity and promote more socially-conscious engineers (Cassidy, 1955; Forbes and Story, 1957). Other studies have confirmed this line of thinking in concluding that the primary "soft skill" learned from the Humanities is empathy for those in STEM (Smith, 2005; Edmondson, Formica, and Mitra, 2020). These are seen to complement the primary field of study, which is most often technical. Others have noted that the role of General Education, supported by the Humanities is at odds with the knowledge-based economy reflected in the global economy (Sirat, 2015).

The focus on the economic impact higher education has on creating a sustainable and well-trained workforce is reflected internationally. Studies in Asia, in particular, find a parallel to those in the Americas. For instance, a study of Malaysian undergraduates identified "endurance force, time management, research experience, and activities involved in university" as the most significant variables in successful employment (Abd Majid, Hussin, Norman, and Kasavan, 2020, p.1). Of these factors influencing employability, the so-called "endurance force" was identified as the most influential, representing 68.5% of predictors of employment. Included in the characteristic is "consistency of stress, physical endurance, adaptability, risk-taking, enthusiasm, high motivation, and willingness to work hard for success," what otherwise Emsi would refer to as "Fortitude" (Emsi, 2021; Abd Majid, Hussin, Norman, and Kasavan, 2020 p.42). Recommendations from the study include the institution's highlighting the marketability of their graduates; providing more community-based, extra-curricular activities; increasing experiential learning opportunities; and, finally, the government should ensure new jobs are created for graduates.

Few studies have been conducted on so-called "soft skills" in the Humanities as opposed to other disciplines. Many that claim to do so are focused on industry studies and the skills employers claim are lacking, but not actual case studies of outcomes from Humanities courses (Edmondson, Formica, and Mitra, 2020). One recent study by Detweiler (2021), however, does provide insight into the value of liberal arts in general. In the longitudinal study of the value of the liberal arts, Detweiler argues that the skills gained from such an education are not job-specific. Whereas other countries, especially India where the focus has historically been on engineering and technology universities, focused on training for industry-specific skills, what differentiates US colleges would be the liberal arts foundation. Detweiler argues that this focus, when tracing the lives and careers of majors from these areas, can use their skills and transfer them to new

situations, jobs, and challenges. Through the educational ecology of purpose, content, and context, Detweiler argues that the values and habits of mind instilled by the liberal arts lead to lifelong learning and cultural involvement after surveying 1,000 college graduates from a diversity of colleges and universities. Comparing vocational to non-vocational majors, the greatest impact can be seen in business/accounting majors, who were 29% less likely to be continuous learners, and social science majors, who had a 36% greater probability of being continuing learners. The integration of humanities was also significant in that 29% had a higher probability of being continuing learners if these issues were in most of their classes, regardless of the field. Engaging pedagogy is also an important factor as 23-25% had a higher probability of becoming lifelong learners if they took seminars or smaller discussion-based courses earlier in their college careers. In essence, students who major in non-vocational degrees are better prepared to be successful in an uncertain and changing future.

With the conversations around skills development changing, and greater emphasis being placed on non-job specific skills, further investigation into where these are being developed during a student's time in college is warranted. The value of durable skills is not in dispute, and those in industry and STEM all agree that students coming out of college need further development in these areas to refine these competencies. To identify strategies to further develop durable and transferrable skills, understanding where and what associated activities or events students and faculty believe are most impactful needs to be researched. As such, the following study will survey both faculty and students to identify where the major career competencies are best fostered and refined in curricular, co-curricular, and/or extracurricular areas.

METHODOLOGY

The mixed-methods study included data from surveys collected by students and faculty. The sample was collected from a private, four-year, liberal arts institution in the suburban ring of St. Louis, Missouri. Participants included 91 faculty and 340 students from the College of Arts and Humanities, College of Education and Human Services, Plaster College of Business and Entrepreneurship, and College of Science, Technology, and Health. The purpose of the project was to assess where students developed durable skills during their time at college. The results gathered were compared with the corresponding themes answered by faculty. This project utilized a mixed-methods study design which included qualitative (open-ended comments) and thematic (quantitative) results from an online survey. The survey was administered in the Spring of 2022 and collected data on student demographics, modality of attendance, where NACE competencies and Graduate Attributes were developed in curricular, co-curricular, or extracurricular activities, and what had the greatest impact on the development of said skills. The instrument was designed using the categories and meta-categories identified by Emsi, NACE, and the Lindenwood University Graduate Attributes and previous literature (Adler, 1992; Madsbjerg, 2017; Khakhalkina, 2018; Weise, 2020; Abd Majid, Hussin, Norman, and Kasavan, 2020; Edmondson and Formica, 2021; Smydra, 2021; Barbuti, Zanni, Russo, and Valentini, 2021).

Participants were asked to indicate via a 1-10 Likert scale their perceptions of durable skills and also rank available options of where they were developed from most to least impactful. Students and faculty were asked an open-ended question regarding what activities they found to be most important for developing durable skills. Students were contacted either through the University course management system or were emailed with links to online surveys. The survey was available for approximately two weeks in the middle of the term and all data was collected using Qualtrics to ensure the privacy and anonymity of responses. These results were sorted based on demographics (age, gender, major, modality, first-generation, veteran, student-athlete and student worker statuses) and data were exported for the survey system. Descriptive statistics were calculated and used for comparisons between groups.

RESULTS

The study examined the perspectives of faculty, graduate, and undergraduate students at a mid-sized private university for patterns and experiences. Special attention was paid to where and how durable skills

were developed in curricular, co-curricular, and/or extra-curricular activities while attending college. Specifically, this study sought to identify and develop (or lack thereof) the following skills (c.f. NACE Competencies):

- Critical thinking and problem-solving
- Teamwork and professionalism
- Leadership
- Career and self-development (life-long learning)
- Oral and written communication
- Equity and inclusion
- Information literacy, quantitative and analytic analysis

The survey instrument, discussed previously, included numeric and open-ended questions. The resulting data were analyzed through descriptive and thematic methods. The total sample size for this study was 340 student respondents and 91 faculty respondents.

Faculty Survey

Faculty across all four colleges were surveyed and demographic data was collected. Of the 91 respondents, 57 were full-time faculty, 33 were part-time faculty, and 1 was staff with teaching responsibilities; 49.45% identified as female, 41.76% male, 8.79% preferred not to say, and none claimed to be non-binary. With regards to teaching experience, 70.33% of faculty respondents claimed to have taught over 10 years, 20.88% 5-9 years, 2.20% 4-5 years, and 6.59% 1-5 years. 45.05% of respondents were from the College of Arts and Humanities, 21.98% College of Science, Technology, and Health, 16.48% from Plaster College of Business and Entrepreneurship, and 16.48% from Education and Human Services.

The faculty were then surveyed on their involvement and in what capacity with students in and outside of the classroom. First, faculty were asked if they advised a student organization on campus. 25.27% responded that they did, while 74.73% did not. Contact with students was next considered by way of advising load. Part-time faculty do not advise, and thus 39.33% of respondents claimed to have 0 advisees, 4.49% 1-5 advisees, 7.87% 6-10, 6.74% 11-15, 8.99% 16-20, 11.24% 21-25, 6.74% 26-30, and 14.61% 30+. In addition to advising students, faculty were asked what percentage of their time they spent directly interacting with students and 32.97% claimed to do so most of the time, 29.67% about half the time, 27.47% sometimes, and 9.89% always. Additional student engagement was surveyed by way of conducting research with students. 24.44% of faculty claimed to conduct research with students, while 62.22% did not, and 13.33% were unsure. Faculty were then surveyed on the kinds of research and scholarship they were engaged in to clarify what they may be working on students with and what types of research might be more conducive to student engagement. Responses were fairly equally distributed with 27.27% of faculty studying teaching and learning, 25.17% original research that advances field-specific knowledge, 25.17% synthesis of information across disciplines, and 22.38% service outside of the University that is evaluated by peers.

To determine what activities were engaged on the part of faculty to develop certain durable skills, engagement and experience in two areas were surveyed. First, engagement with the *Rigor Inclusiveness Support and Engagement* (RISE) program was queried. As the University's diversity, equity, and inclusion program. R.I.S.E. provides training and wrap-around support for faculty and staff to develop skills to support a diverse student population. 42.22% of faculty claimed to be somewhat engaged, 18.89% were somewhat engaged, 10% were somewhat unengaged, 18.89% very unengaged, and only 10% claimed to be very engaged. Next, non-academic experience or industry experience was surveyed among faculty and 75.82% claimed to have gained skills outside of the academy that contributed to their development of durable skills whereas 24.18% claimed they did not. Skills cited in the following open response included exposure to arts and culture, small business ownership, and industry experience.

Critical Thinking and Problem-Solving

Faculty across all colleges were then surveyed on where they believed specific durable skills were being developed. Concerning critical thinking and problem-solving skills, aggregate ranking found that major coursework was noted in 18.80% of the responses, including courses and/or capstones contributed, with 15.04% of the responses pointing to experiential learning, such as study abroad, internships, and service learning, 12.53% faculty mentoring, 11.53% general education, 11.28% minor coursework, 9.52% work study, 9.27% volunteering, 6.52% Student Life, 3.51% First-Year Seminar (UNIV), while 2% selected other and noted work experience as a contributing factor. There was less than a standard deviation difference in responses between faculty that primarily teach General Education and those that do not. At the same time, when considering respondents (n =91), and the multiple rankings possible, the total selected reveals a greater difference in where durable skills are perceived to be developed. Whereas the rank order of what faculty found to be most significant does not change, the disparity in weight placed on different activities influencing skill development does and greatly. For instance, whereas the aggregate score for the first ranking of major coursework was 18.80% when considering the number of faculty respondents, n, 82.42% identified major coursework. The same is true of the rest of the experiences assessed with 49.45% of faculty respondents identifying minor coursework, 50.55% general education, 28.57% student life, 65.93% experiential learning, 40.66% volunteering, 54.95% mentoring, 41.76% work study, and 15.38% First Year Experiences.

Teamwork and Professionalism

Regarding developing teamwork and professionalism, the faculty had a broader distribution of selections. Major courses were identified 15.52% of the time, 7.89% minor coursework, 7.89% General Education, 14.25% Student Life, 14.50% Experiential Learning: Study Abroad, Internship, Service Learning, Research, 12.47% Volunteering, 9.67% Faculty/Staff Mentoring, 13.23% Work Study, and 3.31% First Year Seminar. When considering the number of faculty respondents, 67.03% selected major coursework, 34.07% minor coursework, 34.07% general education, 61.54% Student Life, 62.64% Experiential Learning, 53.85% Volunteering, 41.76% Mentoring, 57.14% Work Study, and 14.29% First Year Seminar. Those who selected Other, once again cited work outside of the institution as a contributing factor. When considering respondents who primarily teach General Education in the Colleges of Arts and Humanities and Science, Technology, and Health, Experiential Learning was identified 15.11% of the time (most frequently) followed by Student Life at 14.39%. However, for those who do not teach General Education coursework, including the College of Education and Human Services and Plaster College of Business and Entrepreneurship, major coursework was identified 19.01% of the time (most frequently) followed by Student Life at 14.88%.

Leadership

Regarding developing leadership skills, faculty pointed to activities on campus and leadership roles students can take as most influential. Major coursework was identified13.27% of the time, 5.01% Minor coursework, 5.60% General Education, 18.58% Student Life, including Student Organizations, Greek Life, and Athletics, 15.34% Experiential Learning, 16.22% Volunteering, 9.14% Faculty/Staff Mentoring, 12.68% Work Study, 2.95% First Year Seminar, and 1.18% Other. When considering the number of faculty respondents, 49.45% selected major coursework, 18.68% minor coursework, 20.88% General Education, 69.23% Student Life, 57.14% Experiential Learning, 60.44% Volunteering, 34.07% Mentoring, 47.25% Work Study, and 10.99% First Year Seminar. In the free responses, faculty reiterated student life and work experience. Respondents from colleges that teach General Education coursework gave equal weight to Student Life and Volunteering (18.10% of the responses), whereas those that were not ranked Student Life (19.64% of responses) followed by Experiential Learning (16.96%).

Career and Self-Development

Regarding developing career and self-development skills to be a lifelong learner, faculty ranked experiential learning and major coursework as the most influential. Major coursework was selected 17.69%

of the time (by 79.12% of the faculty), 10.07% (45.05% of the faculty) Minor coursework, 11.06% (49.45% of the faculty) General Education, 8.11% (36.26% of the faculty) Student Life, 15.72% (70.33% of the faculty) Experiential Learning, 9.83% (43.96% of the faculty) Volunteering, 12.53% (56.04% of the faculty) Faculty/Staff Mentoring, 9.83% (43.96% of the faculty) Work Study, 4.18% (18.68% of the faculty) First Year Seminar, and .98% (4.40% of the faculty) Other. In other, the faculty noted work, hobbies, and practicum experiences. Faculty across all colleges had nearly the percentages and the same rankings.

Oral and Written Communication

Regarding developing oral and written communication skills, faculty overwhelmingly pointed to General Education and Major Coursework. Major coursework was selected 19.47% of the time (by 80.22% of the faculty), 15.47% (63.74% of the faculty) Minor coursework, 18.67% (76.92% of the faculty) General Education, 7.20% (29.67% of the faculty) Student Life, 10.93% (45.05% of the faculty) Experiential Learning, 5.60% (23.08% of the faculty) Volunteering, 10.13% (41.76% of the faculty) Faculty/Staff Mentoring, 7.47% (30.77% of the faculty) Work Study, 4.53% (18.68% of the faculty) First Year Seminar, and .53% (2.20% of the faculty) Other. In other, faculty noted tutoring as another important factor. Interestingly, those from colleges responsible for General Education coursework ranked those classes as the most influential (20.25% of the responses) followed by major coursework (19.83%). Those from other colleges ranked major coursework first (18.57%) followed by General Education (16.43%).

Equity and Inclusion

Regarding developing a sense of equity and inclusion, the faculty pointed to experiences outside the classroom. Major coursework was selected11.36% of the time (49.45% of the faculty), 8.08% (35.16% of the faculty) Minor coursework, 11.87% (51.65% of the faculty) General Education, 15.91% (69.23% of the faculty) Student Life, 15.15% (65.93% of the faculty) Experiential Learning, 14.39% (62.64% of the faculty) Volunteering, 9.09% (39.56% of the faculty) Faculty/Staff Mentoring, 8.08% (35.16% of the faculty) Work Study, 4.80% (20.88% of the faculty) First Year Seminar, and 1.26% (5.49% of the faculty) Other. The free responses also reinforced that DEI characteristics were gained outside of the classroom as dorms and social life were cited as major contributing experiences. Faculty teaching in colleges responsible for General Education cited Experiential Learning and Volunteering as equally important (15.58% of responses) followed by Student Life (15.22%). Faculty in other colleges ranked Student Life first (17.60%) and major coursework and Experiential Learning tied for second (14.40%). Importantly, only 9.78% of responses from colleges that teach General Education selected major coursework in comparison with 14.40% for those that are not.

Information Literacy

Regarding developing skills including information literacy, and quantitative and analytic analysis, faculty pointed to General Education and major coursework. Major coursework was selected 25.08% of the time (82.42% of the faculty), 17.73% (58.24% of the faculty) Minor coursework, 19.40% (63.74% of the faculty) General Education, 2.68% (8.79% of the faculty) Student Life, 13.38% (43.96% of the faculty) Experiential Learning, 3.34% (10.99% of the faculty) Volunteering, 9.70% (31.87% of the faculty) Faculty/Staff Mentoring, 5.69% (18.68% of the faculty) Work Study, 2.68% (8.79% of the faculty) First Year Seminar, and 0.33% (1.10% of the faculty) Other. Interestingly, faculty who responded to other cited upper-level classes, where students were invested in the subject matter, to be the most influential. Respondents from colleges that teach General Education ranked major coursework first (24.41% of the responses) and minor coursework second (17.37%) whereas those who did not s major coursework (27.47%) followed by General Education (20.88%). It is important to note that students more often major in the colleges without General Education departments and minor in those with them.

Finally, faculty were asked an open-ended question about what they felt was the most influential and impactful event or activity that led to students developing these durable skills. The responses from faculty reiterated those activities cited above, including internships, study abroad, First-Year Experience, faculty

mentoring, and more. Faculty respondents from colleges that teach General Education repeatedly cited General Education, internships, and research in capstone courses as the most impactful. Faculty from other colleges also noted the importance of internships (though less frequently), but instead pointed to work outside of academia, faculty mentoring, and athletics.

Student Survey

Students across all colleges were surveyed and demographic data was collected from them. 340 students responded to the survey. Of those, 64.71% were undergraduate students and 34.41% graduate students; 56.43% were 18-24 years of old, 19.30% 25-34 years of age, and 11.40% 35-44 years of age; 8.48% 45-54 years of age; 4.09% 55-64; .29% 65+ years old; 68.71% identified as female, 28.36% male, .88% non-binary, and 2.05% preferred not to say; 9.06% identified as Latinx, 79.38% white, 4.52% Asian, 1.41% Native American or Alaskan Native, 11.02% Black or African American, and 3.11% other. 10.53% identified as an international students; 15.50% as a student-athlete; 13.45% as a student employees; 11.40% indicated they had a disability; 4.97% were veterans; 26.1% identified as first-generation students; 67.46% were commuter students and 32.54% residential; 50% were taking classes only online, while 30.07% face-to-face and 19.93% hybrid.

Critical Thinking and Problem-Solving

Students were then asked where they believed certain durable skills were developed either in coursework, extracurricular or cocurricular activities. When asked where students developed critical thinking and problem-solving skills, major coursework and General Education classes were the most influential. Major coursework: 36.76% of the responses (52.34% of the students responding) Courses/ Capstone, 8.62% (12.28%) Minor coursework, 15.20% (21.64%) General Education, 8.62% 12.28%) Student Life, 8.01% (11.40%) Experiential Learning, 5.95% (8.48%) Volunteering, 4.93% (7.02%) Faculty/Staff Mentoring, 3.29% (4.68%) Work Study, 1.64% (2.34%) First Year Seminar, and 6.98% (9.94%) Other. Students taking classes in different modalities also ranked the same in their top two of most influential. However, students taking face-to-face coursework ranked the importance of General Education coursework the highest (17.81% of the responses), while hybrid and online students lower at 14.53% and 14.03%, respectively. Undergraduate and graduate students had nearly the same ranking for major coursework and General Education (which is interesting given graduate students take no GE coursework), but there were differences in percentage and qualitative responses when selecting Other. Only 4.49% of undergraduate responses pointed to Other and subsequently identified experience in a branch of the armed services, honors college, and off-campus work as influential. Graduate students, on the other hand, selected Other 11.76% of the time and the free responses indicated that work and life experience outside the classroom was most influential.

Teamwork and Professionalism

When asked where they felt teamwork and professionalism were developed as part of their time at college, students ranked their major coursework as by far the most significant at 27.81% frequency (39.77% of the student respondents). This was followed by Student Life at 15.54% (22.22%), General Education at 12:27% (17.54%), experiential learning at 7.98% (11.40%), volunteering at 7.77% (11.11%), faculty/staff mentoring at 5.95% (9.94%), minor coursework at 6.54% (9.36%), Other at 7.16% (10.23%), work-study at 4.29% (6.14%) and First-Year Seminar at 3.68% (5.26%). In this instance, the difference in modality was even more dramatic with face-to-face students ranking Student Life first at 26.35% and major coursework second at 24.32%; hybrid students ranked them equally at 20%, and online students major coursework first (33.77%) and General Education second (13.16%). Both undergraduate and graduate students ranked major coursework as the most influential. Undergraduate students ranked (20.43% frequency) experiences in Student Life as second whereas graduates (13.25%) Faculty and Staff Mentoring. Not surprisingly, graduate students who selected Other noted work and life experience outside the classroom as most influential for building teamwork, but undergraduates pointed to athletics, on-campus work, and co-curricular experiences, such as theatrical performances.

Leadership

Regarding developing skills in leadership, students pointed to major coursework at 24.72% frequency (by 31.87% of the students) and Student Life at 20.18% (26.02%). These were followed by 9.07% General Education (11.70%), 9.07% volunteering (11.70%), 8.62% experiential learning (11.11%), 5.90% faculty/staff mentoring (7.60%), 5.22% minor coursework (6.73%), 4.31% work study (5.56%), First-Year Seminar 1.81% (2.34%), and Other 11.11% (14.33%). The different modalities demonstrate a less homogenous experience. As expected, face-to-face students ranked Student Life first (32.84%) followed by major coursework (23.88%); hybrid students had the same ranking, but were less influenced by each at 26.6% and 17.02%, respectively; and online students had the greatest divergence in experience, ranking major coursework first (28.57%) followed by Other (17.62%). The free responses of the online population confirm outside work experience was most influential after coursework. Undergraduates ranked leadership the same as teamwork and professionalism. Graduates, on the other hand, followed major coursework (28.03%) with Other (14.65%) and solely credited work experience.

Career and Self-Development

When asked to consider where skills including career and self-development to be a lifelong learner, students far and away selected major coursework at 31.10% frequency (by 48.83% of the student respondents). In-class work was followed by General Education at 12.66% (19.88%), Student Life at 9.87% (15.50%), minor coursework at 9.68% (15.20%), Experiential Learning at 9.12% (14.33%), Faculty/Staff Mentoring at 7.26% (11.40%), Volunteering at 6.15% (9.65%), Work Study at 3.35% (5.26%), First Year Seminar at 2.98% (4.68%), and Other at 7.82% (12.28%). Face-to-face students had the same top two categories at 30.25% and 13.58% frequency, respectively; online students had the same estimation at 33.33% and 13.41%; however, hybrid students disagreed and instead followed major coursework (28%) with Student Life and Experiential Learning tied at second (12.80%). Undergraduate students had nearly the same percentages and ranking when broken out, but in Other cited experiences with armed services, on and off-campus work, several stated that they did not possess this skill. Graduate students ranked their skills in self-development similar to that of the development of teamwork and ranked major coursework first at 31.98% frequency and Faculty and Staff Mentoring at 12.21%.

Oral and Written Communication

Regarding developing oral and written communication skills, students considered both major courses at 33.59% frequency (by 51.75% of the student respondents) and General Education at 26.76% (41.23%) to be the most influential. Student Life followed these at 7.21% (11.11%), Minor coursework at 9.68% (14.91%), Experiential Learning at 5.31% (8.19%), Volunteering at 4.17% (6.43%), Faculty/Staff Mentoring at 4.36% (6.73%), Work Study at 2.09% (3.22%), First Year Seminar at 1.71% (2.63%), and Other 5.12% (7.89%). When looking at undergraduates separately, however, the perceived significance of General Education is noticeable. The development of communicative fluency was seen to be mostly influenced by these courses with 31.04% ranking first with major coursework second at 29.25%. Graduate students also had the same two categories ranked, but major coursework was first at 41.47% and General Education half of that at 19.47%. As with critical thinking, face-to-face students ranked General Education highest (34.29%) followed by major coursework (30%); hybrid and online students were largely in agreement, ranking major coursework first followed by General Education.

Equity and Inclusion

In considering where students developed a sense of Equity and Inclusion, students cited major coursework 23.92% of the time (by 33.92% of the student respondents) and Student Life 20.21% (28.65%) as the most influential. These were followed by General Education at 14.43% (20.47%), Volunteering at 7.63% (10.82%), Experiential Learning at 6.80% (9.65%), Minor coursework at 6.60% (9.36%), Faculty/Staff Mentoring at 5.15% (7.31%), First Year Seminar at 3.92% (5.56%), Work Study at 3.09% (4.39%), and Other 8.25% (11.70%). Undergraduate students, however, ranked experiences in Student Life as most important (25.72%), followed by major coursework (21.22% and General Education (16.08%).

Graduate students ranked major coursework first (28.57%) and General Education second (12.50%). The free responses also point to different life experiences between the populations with more engagement with on-campus activities and exposure to different populations for undergraduates, and more life experience for graduate students. At the same time, the hybrid population (23.76% of their responses) and the face-to-face population (30.32% of their responses) ranked Student Life as the most important for developing DEI skills. Hybrid students also ranked General Education as a second (17.82% of responses) whereas face-to-face major coursework (20%). Online students, who have the least opportunity for engaging in on-campus activities, ranked major coursework first (30.36% of their responses) and General Education second (13.39%).

Equity and Inclusion

Finally, students were asked where they had developed information literacy, and quantitative and analytic analysis skills, and overwhelmingly they selected major coursework/capstone at 40% frequency (56.14% of respondents). General Education ranked second at 23.96% (33.63%). All three modalities had the same top two selections. The other scores clustered closer together with minor coursework 12.92% (18.13%), experiential learning 6.04% (8.48%), faculty/staff mentoring 3.96% (5.56%), Student Life 3.75% (5.26%), work-study 2.5% (3.51%), volunteering 2.29% (3.22%), First Year Seminar 0.83% (1.17%), and Other 3.75% (5.26%). There was little difference in ranking between undergraduate and graduate populations.

The free responses from students were also telling and reflected the ranking and differences in populations and their respective experiences. The final question asked students what the single most impactful activity was in developing durable skills. Undergraduates pointed to curricular, co-curricular, and extracurricular activities. On-campus social activities were noted multiple times: "Meeting classmates and making friends and helping each other out with classes." Cocurricular activities were also popular as they allowed for students to develop skills while engaging with their peers: rehearsals for theatrical productions, playing sports, and engaging in activities related to coursework. Extracurricular activities were also popular with Student Life featuring prominently – Homecoming, Student Involvement, Sporting Events, and student clubs. Graduate student-free responses to the same question continue the differences noted above. Aside from in-class activities, such as mock arbitration, respondents consistently noted how important faculty mentoring was: "Having a mentor and overall staff who has been happily willing to make time for you, to talk/brainstorm, even over Zoom." Personalized engagement one-on-one with faculty and staff thus ranked high in the free responses for assisting in developing durable skills.

CONCLUSION

The development of durable skills can be attained in a variety of ways in curricular, co-curricular, and extracurricular activities during the time in college. The results from the study here indicate the rich array of opportunities students have in their educational environment to further refine these transferable skills that are highly desirable among employers. Considering the role of general education, students consistently ranked these experiences in the top 75% in each category and faculty in traditional academic areas. Faculty and students both repeatedly identified the same top six areas where skills were developed, and both groups acknowledged the different ways in which these could be engaged with. However, even though the rank order was similar between groups, the disparity in overall respondents in the selection of each category varied widely. For instance, faculty regularly ranked their role in teaching coursework in their majors as much more influential- especially for critical thinking, problem-solving, teamwork and professionalism, career and self-development, and written and oral skills- as opposed to students, who, while still ranking high, did not agree to such a degree. The more traditional "academic" skills, such as writing and quantitative analysis, displayed much narrower top choices for both groups. For instance, students concentrated their rankings on three areas for information literacy, quantitative and analytical skills, including major coursework, minor coursework, and general education. At the same time, non-traditional "academic" skills, such as equity and inclusion, leadership, teamwork, and professionalism found faculty pointing to activities

outside of the classroom, especially experiential learning, and student life activities. On the other hand, students found these skills developed in class more often than faculty. Faculty seemed to consider the content of their disciplines as their primary purview and thus many durable skills fell outside of the classroom for them. Students saw classroom activities often as equally impactful in developing durable skills.

The study recommends identifying where durable skills are already being taught in the curriculum. To clarify and highlight what activities should reinforce those skills for both faculty and students, clearly identifying them in the syllabus through "skillification" or "skillifying the syllabus" should be a priority. Along with outlining the course and program level outcomes, faculty should identify which durable skills are covered as part of the class (e.g., written communication or problem solving). Postsecondary institutions need to consider a holistic approach to student learning when considering whether durable skills are developed through the material content covered or how that material is taught. Experiences in classrooms are equally important for building transferable skills as those outside. A greater synergy needs to be reached between expectations and content covered in general education coursework, that is taught in the major and minor, and experiences where those skills may be practiced and reinforced outside. As employers increasingly demand general competencies in durable skills as noted in job postings compared to pre-pandemic, a college education needs to address the skills gap and realize field-specific knowledge is as important as, or arguably less so than, transferable skills that can be applied in a wide array of future careers and situations. As such, adaptability has become one of the most significant employable skills.

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