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The aim of the Journal of the European Honors Council is to share research results, knowledge and good practices related to talent development and honors programs in higher education.

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Instructions for authors

We invite you to submit research papers, as well as notes on good practices or preliminary research results to the Journal of the European Honors Council. Instructions on how to contribute can be found on the website www.jehc.eu.

There are two options for contributors: peer-reviewed papers or edited notes.

1. Peer-reviewed paper

This is a contribution of between 1,500 and 5,000 words (approximately). After receiving your paper, the editorial board will send it to two reviewers who remain anonymous to the authors. The reviewers can indicate if they accept the paper (with minor changes), ask you to submit a new version with major changes, or reject the paper. Major considerations are:

- The paper is written in English, in a clear and concise language that will help editors and reviewers concentrate on the scientific content of your paper.
- The paper is relevant in the context of the EHC goals (see below).

2. Edited note

This is a contribution of between 500 and 1,500 words (approximately), briefly summarizing (preliminary) findings or good practices. Notes are edited by the editorial board. They need to be written in English, in a clear and concise language that will help readers to concentrate on the content, which should be relevant in the context of the EHC goals (see below).

In all cases, authors should send in their manuscripts following the template which can be found on www.jehc.eu. Contributions are considered in the order they are received. Once accepted, we aim to publish as quickly as possible. Online publishing is in pdf-files.

In case of questions, the Editorial Board of the Journal of the European Honors Council can be contacted by e-mail: journal@honorscouncil.eu.



The European Honors Council pursues the following goals:

1. Supporting and stimulating development of honors education and its structural embeddedness in the education system
2. Creating a common language
3. Supporting teacher professionalization (within honors)
4. Creation and exchange of knowledge about honors programs
5. Stimulating and facilitating research about honors
6. Enabling networking for people involved in honors
7. Stimulating spin-off of successful honors practices to regular education
8. Promoting an easier flow of talented students from secondary to higher education
9. Stimulating professional development of honors students and connection to working life / research career
10. Stimulating collaboration and inspiring student exchange at honors level



JOURNAL OF THE EUROPEAN HONORS COUNCIL

Note

Introduction to the special issue: Honors education in the digital age

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1. Introduction

The Editorial Board is honored to present a new special issue of the *Journal of the European Honors Council (JEHC)*, focused on *Honors Education in the Digital Age*. When this special issue was planned in mid-2019, we could not have imagined that, at the time of publication almost all education around the world would have been digitalized, following the COVID-19 pandemic that started to spread around the world in the first months of 2020. Education, including honors education, was forced to enter the digital age almost overnight.

At the start of the pandemic, the deadline for the special issue had passed and contributions were already being processed. However, following these developments, in April of 2020, the special issue was briefly reopened for new contributions related to the COVID-19 crisis. We now present a special issue section combining five original contributions and five new COVID-19-related contributions. Additionally, we also publish two other contributions which are not specifically related to the theme of the digital age but are relevant for the development of honors education around the world. All contributions form an issue which emits a high sense of urgency.

2. Contributions originally received for the special issue

The contributions originally received for the special issue share a practical approach towards dealing with the reality of the digital age we have entered. We open the special issue with a paper on the professional competencies needed to thrive in the new economy that has undergone a Fourth Industrial Revolution. In "The W-shaped professional competencies model for the Fourth Industrial Revolution and its relevance to honors programs," Beata Jones (USA), and Albert Pilot, Pierre van Eijl, and Josephine Lappia (Netherlands) propose the W-shaped professional competencies model, which is focused on human literacy, digital

fluency, hyper-learning, and systems and design thinking competencies. The paper can be read as a call to action for university administrators and teachers to rethink their approach to the skills they focus on in their teaching to make education more relevant for the current digital age.

In his note “Academic skills in the screenish era,” Peter Bradley (USA) also focuses on skills. Now that we have moved from a “bookish” to a “screenish” era, a change is needed in the academic skills required and taught. Bradley argues that we must “use the honors tradition of allowing our students to shape their education to create a system of education for the future, not the past.”

But how can such education for the future practically take shape? In their paper, “The digital common read: Creating a space for authentic engagement with social annotation,” Matthew Wranovix and Mary Isbell (USA) provide an example. They describe their experience in using a system of digital annotation of literature to create an online space where incoming first-year students can engage with each others’ ideas and get a social and intellectual experience before arriving on campus.

Moving to the organizational side of education, many honors programs and colleges need to raise funds. In the note “(Fund)raising honors: Blending conventional and technological approaches to development,” Rebecca Bott-Knutson, Hanna Holmquist, and Keith Mahlum (USA) share their approach to the fundraising issue in the digital age, combining conventional approaches with the use of digital platforms. The focus is always on raising honors, by using a strategy of raising the bar, raising awareness, and raising relationships.

Finally, some more food for thought is provided by a review of *Robot-proof: Higher education in the age of artificial intelligence* (by Joseph E. Aoun). Reviewer Albert Pilot discusses Aoun’s innovative concept of “Humanics” as a discipline that teaches both mastery of professional knowledge and the development of technological literacy, data literacy, and human literacy. He suggests that honors programs can serve as a laboratory for the new forms of education suggested by Aoun.

3. Handling COVID-19 implications and the digitalization of education

The second part of this special issue includes five contributions directly related to the effects of the COVID-19 pandemic. These contributions are focused on showing practical ways to handle the challenges of the sudden digitalization of university education. In the note “Honors in the Time of Corona,” John Zubizarreta (USA) presents and discusses a highly useful collection of international resources on four topics: retooling faculty approaches to teaching; addressing student access and success; adapting capstone projects and presentations to online delivery and assessment; and adjusting grades.

A specific challenge for honors education in times of lockdown and restrictions on physical meetings is how to create and maintain a sense of community. In the note “Creating community during the COVID-19 pandemic: Honors makes a case online,” Marca Wolfensberger and Marte Vroom (Netherlands) present the approach taken by the honors program they are involved in as a coordinator and a student. The focus is on wellbeing and community, creating a series of online meetings where movies, TV series, or books are

discussed, but where there is also room to share experiences during the pandemic. The honors students organize these meetings themselves and feel empowered by the opportunity to do so.

The paper “Assessment of the impact of COVID-19 on honors student learning, institutional connections, and intent to return to campus” by Evren Celik Wiltse, Michael Gonda, Camille Massmann, Kas Williams, and Rebecca Bott-Knutson (USA) reports on quantitative and qualitative research among honors and non-honors students on the impact of the pandemic. A lot of students struggle after the transition to an online environment and the need for improved communication is clear. Honors students, though, report fewer technology barriers and financial stressors than non-honors students. Degree completion and social connections are driving students’ desire to return to face-to-face classes.

Shifting focus from students to staff, John Zubizarreta and Beata Jones (USA) and Marca Wolfensberger (Netherlands) discuss experiences in building an online occasion for professional development in the note “Honors International Faculty Learning Online (HIFLO 2020): A model for honors online professional development.” The authors delivered two online seminars focused on “Creating Community—Experiences from Honors” and “Remote Honors—Teaching for Deep Virtual Learning,” respectively. Eleven lessons learned in preparing and executing these seminars are shared, aiming to inspire others to engage in similar endeavors.

In the note “Remote teaching transition during COVID-19 – the first five weeks and the start of a digital knowledge-building community,” Marca Wolfensberger & Ning Ding (Netherlands) return to the reality of the first few weeks during the pandemic. A digital knowledge-building community gradually emerged after initial experimentation by individual teachers to find suitable digital forms to deliver content, to keep communicating with students and colleagues, and to assess learning outcomes. Even in these first few weeks, a need for new pedagogies already became apparent, but time was lacking to rethink approaches. Moving into a new phase of the COVID-19 crisis, these lessons from the first few weeks should not be forgotten.

4. Other contributions

As the final treat in this issue, we present two highly relevant contributions not directly related to the topic of the digital age. In the first note in *JEHC* to come from Russia, Maria Tarasova presents “Highlights of the 2019 honors session at the International Students’ Conference in Siberian Federal University, Russia.” Tarasova also takes the opportunity to briefly introduce the program at her university, which was started in 2017. While this note was not submitted to be a part of the special issue, it does contain an interesting section on the use of gamification.

Finally, we return to the topic of competencies in the paper “Relevance and meaningfulness: Student perspectives on the highly talented international business professional profile” by Petra van Heugten, Marjolein Heijne-Penninga, Patricia Robbe, Debbie Jaarsma, and Marca Wolfensberger (Netherlands). The authors discuss the talent competency framework that was developed for highly talented international business professionals and then focus on honors students’ perspectives on this profile. Which elements do they experience as

relevant and meaningful, and how do they perceive working with it? Results suggest that relevance and meaningfulness can be improved through better alignment between educators and the professional field.

5. Final remarks

JEHC's general aim is to share knowledge and good practices regarding honors programs and talent development programs in higher education. Education has entered the digital age, and the COVID-19 pandemic has further highlighted the urgent need to deal with this transformation, whether we like it or not. This special issue provides research results, models, reflections, and examples that may help educators respond to the challenges they are currently facing, as well as those that lie further ahead.

JEHC will continue to publish contributions on research into honors and talent development in higher education. The Editorial Board invites you to contribute to the next issue(s) of the journal by sending in your papers and notes. All information on contributing can be found on the website www.jehc.eu.

Acknowledgments

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Paper

The W-shaped model of professional competencies for the Fourth Industrial Revolution and its relevance to honors programs

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Abstract

As the world is undergoing the Fourth Industrial Revolution (4IR), the fusing of physical, digital, and biological worlds with new technologies, we experience the profound impact of this revolution on the labor markets and the subsequent career planning of students. The new economic reality created by 4IR calls for immediate action in the world of higher education. The purpose of this paper is to advocate for new key competencies that university students will need to thrive in the new economy. These competencies include human literacy, digital fluency, hyper-learning, and systems and design thinking. Together, they are presented as the “W- shaped 4IR Competency Model.” This model combines previously published opinions about the topic from various educational futurists who have tackled the issue. This paper includes a call to action for universities to address the skills gap challenge of college graduates and rethink their value propositions. As honors programs are the breeding ground for innovation, universities might consider starting to test the robot-proof, twenty-first-century curricula with the smaller honors cohorts and then consider the curricular transfer to the mainstream educational programs. We urge honors educators and administrators around the world to adopt curricula that will make their graduates “robot-proof” and able to thrive in the new economy for decades to come.

Keywords: honors competencies; honors skills; fourth industrial revolution; digital age; 4IR

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1. Introduction

Higher education must prepare students for a working environment in an economy that has just undergone the Fourth Industrial Revolution (4IR, see Section 3), where artificial intelligence is now increasingly playing an important role. Schwab (2016) explains that the Fourth Industrial Revolution is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres. Robots, artificial intelligence, and various other information technologies, applied at an ever-increasing pace within professions, will have a profound impact on the white-collar employment of college graduates (Went, Kremer & Knottnerus, 2015; World Economic Forum, 2018). How should our university training change as a result? Many programs in higher education are ill-prepared for the new reality, and we believe the problem is urgent. Since this is not a widely shared concern, this article is a call to action to convince educators—especially the honors program directors—of why action is needed.

Social and scientific developments require higher education renewal to meet the demands of the twenty-first century on the knowledge, skills, and mindsets of university graduates. The students who are now starting their higher education will enter the labor market in 2024 and will need to work for at least forty years. The half-life (that is the amount of time that has to elapse before half of the knowledge or facts is superseded or shown to be untrue) of the knowledge they acquire in college is under five years (Arbesman, 2013). Therefore, current students must develop not only their basic capabilities while in college, but also continue to develop themselves throughout their professional careers. We need, therefore, transformational learning (Mezirov, 1994) where students change their frame of reference about their world and leave the university as a different person than when they arrived. Honors education, often considered a laboratory for innovation in mainstream higher education (Wolfensberger, van Eijl & Pilot, 2012), can play a key role in experimenting with various paths forward, addressing the challenge of transformational learning. We as honors educators can help find the educational paths, where we currently have no roadmap. The remainder of the paper starts with the role of honors programs as laboratories of innovation for new developments. Then, the paper builds on the ideas of the changing nature of people, labor markets, and learning as a function of 4IR and proposes a new framework, the W-model, for honors education competencies and higher education at large. Four groups of competencies are identified as key in this model and then explained: human literacy, digital fluency, hyper-learning, and systems and design thinking. The paper concludes with a discussion of the proposed model limitations and the possible role of honors programs in the process of innovation towards 4IR-curricula.

2. Purpose of honors programs in higher education and their innovative function

The current purpose of higher education is to sustain the development of societies by enabling citizens to 1) play a productive role in society, 2) provide for a culture transfer, and 3) develop innate human potential (Seldon & Abidoye, 2018). Universities achieve their missions by various means (Xing & Marwala, 2017), focusing on knowledge acquisition and, more recently, skills development. An important purpose of honors programs worldwide is their role as laboratories of educational innovation within broader university programs, ultimately transforming the regular curricula (Wolfensberger et al., 2012). Honors programs typically provide motivated and able students an opportunity to realize their potential; to build a culture of excellence as a part of an agenda of an institution or a country; and to

provide an authentic learning environment with wicked problems that invite students within their learning communities to “learn how to innovate” (Lappia, 2015, 226; Wolfensberger, 2015, 16).

Honors programs across the globe differ in their guiding principles (Jones, 2016). The goal of honors in the United States is to offer “opportunities for measurably broader, deeper, and more complex learning-centered and learner-directed experiences” (NCHC, 2017). The modes of learning include research and creative scholarship, multi- or interdisciplinary learning, service-learning and leadership, experiential learning, and learning communities. Many honors programs in Dutch colleges and universities, on the other hand, focus on acquiring the following skills and competencies (Lappia, Weerheijm, van Eijl, & Pilot, 2014; van Eijl & Pilot, 2016) :

1. Personal development: Who am I? What do I want? What can I do well? How do I get there?
2. Multidisciplinary collaboration: Teamwork in projects where multidisciplinary perspectives were important.
3. Communication: Oral, written, and digital with fellow students and outside partners in authentic assignments requiring empathic listening.
4. Creativity: Thinking outside the box in projects and assignments

As honors programs are the breeding ground for innovation, universities might consider testing the twenty-first-century curricula with the smaller honors cohorts (van Eijl & Pilot, 2016) eager to focus on self-improvement and willing to tackle the development of relevant competencies needed for the Fourth Industrial Revolution (see Section 4).

3. Fourth Industrial Revolution

Fourth Industrial Revolution (4IR) (Schwab, 2017) refers to the fusing of physical, digital, and biological worlds (e.g. autonomous weapons, 3D Printing, synthetic biology) and is characterized by the growing use of technologies such as artificial intelligence, Internet of Things, robots, drones, virtual reality, cloud computing, and other advanced wireless technologies that are expected to change all disciplines, economies, and industries at an unprecedented rate. These new technologies are changing us and altering what it means to be human, resulting in changes to the way we think, live, work, and interact with each other (Kaplan, 2015; Levy & Murnane, 2012).

The 4IR is not just about technology and the unprecedented speed with which it changes the world we live in. 4IR creates an opportunity to take advantage of our global communities, build sustainable economies, become more equitable and inclusive, and shape a human-centered world by leveraging the new technologies. 4IR therefore gives us a chance to build a world of greater creativity, higher purpose, and deeper fulfillment (Neumeier, 2013, 21) by automating most mundane processes and allowing us to focus our energy on creative endeavors. Because of these opportunities, the following sections focus on some implications of the 4IR for people, labor markets, and learning, setting the foundation for the future of higher education and honors programs.

4IR implications for people

4IR holds great promise for improving the quality of life for the world’s population, allowing our cities, governments, workplaces, and organizations to become “smarter” and requiring

us to plan for and adapt to these new technological capabilities. The changes require governments and businesses not only to keep up with the investment in infrastructure but also to develop future leaders who can take advantage of the new capabilities provided by the technology. Because of these societal changes, the tools and processes of the pre-digital era will no longer be effective in the next decades (Stevens & Strauss, 2018). People will be required to learn, unlearn, and relearn technologies, as demonstrated recently with the COVID-19 pandemic and the need to adapt to remote work within a week's notice.

Additionally, the use of social media for communication appears to have resulted in a lower level of social skills and empathy among young adults and children, as evidenced by the work of Campbell (2018), Grainger & Bandura (2019), and Sabatini & Sarracino (2014). The decrease in direct communication may have eroded our capacities to cooperate, to communicate in-depth, and to understand others (Colvin, 2015). "Retooled by the tools we use, our brain adjusts and adapts" (Davidson, 2011, 16). The new technological tools are not a "bad thing," though. We just must prepare the next generation of college graduates to harness them appropriately.

4IR implications for the labor markets

The developments in information technology also have a profound impact on the labor markets (Went et al., 2015) and career planning for the students of today (Frey & Osborne, 2013; Eliot, 2017; Beaudry, Green & Sand, 2013; IBA Global Employment Institute, 2017; Campbell, 2018; van Heugten et al., 2016). Tse, Esposito & Goh (2018) report a popular estimate that 65% of children starting elementary school this year will work in jobs that do not exist yet. Artificial intelligence could eliminate between 7 and 47% of the current jobs by the year 2030 (McDonald, 2019). The Dutch Scientific Council for Government Policy and the World Economic Forum expect that both routine activities and complex skills will become vulnerable to automation (Went et al., 2015; World Economic Forum, 2018). Artificial intelligence is effective when large data sets are available for training and testing and will, therefore, heavily influence the labor market of highly educated people. The 4IR is not about replacing human labor and energy by machines but about replacing human thinking, including recognizing and interpreting human facial expressions, voices, and emotions, and analyzing patterns and relationships that people do not see or understand.

The future workforce is expected to be a blend of humans and robots working together to enhance the employee experience in the gig economy (Meister, 2019). To become *robot-proof*, i.e., to become irreplaceable by even the most sophisticated artificial intelligence (Aoun, 2017; Pilot, 2020), we will have to embrace the new systems and robots and re-skill, if needed, to work along with them. We will need to become excellent at everything that makes us uniquely human and embrace the economy with its new challenges (Seldon & Abidoye, 2018; McKinsey Global Institute, 2019).

4IR implications for learning

Institutions of higher education also benefit from the new technologies available today. Professors take advantage of vast online resources and tools, enriching their teaching, and providing more stimulating courses. Video and collaboration technologies (Zubizarreta, 2020) allow remote participants to take live, online classes, as seen with the COVID-19 lockdowns. Distance learning with asynchronous courses allows working individuals to

complete online degrees or needed training without leaving their jobs or home at a lower cost. It is easier than ever to acquire knowledge and learn, whether through formal or informal education. Therefore, simple knowledge and rudimentary skills acquisition can no longer be the value proposition for universities or honors colleges.

Universities have already been under pressure worldwide to rethink their educational offers (Seldon & Abidoye, 2018), facing problems of affordability, maintaining quality, and, most notably, lack of adequate preparation for careers. Though the return on investment in college degrees is still positive, their value is deflating as the costs of higher education continue to increase (Aoun, 2017). A new focus on preparing college graduates for life in 4IR, using the newly available resources and tools, might help alleviate some of the current criticisms of higher education mentioned earlier.

4. Implications of 4IR for change in the competencies developed during college

What expertise, skills, and attitudes should we help develop in our students to prepare them to flourish in the new economy? To answer this question, the authors carried out an investigation by the method of theoretical generalization (Payne & Williams, 2005) and analysis of recommended practices, using descriptive approaches of comparative education via a document review of reports, books, websites, articles in scientific journals, and conference proceedings. Databases were searched using combinations of keywords such as “21st century,” “Fourth Industrial Revolution,” “future,” “skills,” and “competencies.” The selection of sources was made based on the subjective judgement of the authors' importance in the domain of discourse. Identified competencies, repeatedly advocated by researchers, were generalized by the first author into four groupings of related items.

Based on the above analysis, the following four competencies for success in the twenty-first century have been identified: *human literacy*, *digital fluency*, *hyper-learning*, *systems and design thinking* (Toffler, 1970; De Waal, 2009; Thomas & Brown, 2011; Davidson, 2011, 2017; Neumeier, 2013; Colvin, 2015; Aoun, 2017; van Eijl et al., 2017; Kosslyn, 2019; Seldon & Abidoye, 2018; Tse et al., 2019; Meister, 2019). These competencies include capabilities or “observable human attributes that are demonstrated independent of context” (Hagel, Brown & Wooll, 2019, “The good news”), such as human literacy, and the remaining metacognitive skills that are transferrable from situation to situation and from domain to domain. When these four competencies are combined with deep functional expertise in at least one field, the competencies promise to deliver excellence in future jobs, including the ones that might not exist yet. Table 1 below presents an explanation of the four sets of competencies and a brief discussion of each competency follows.

Table 1. 4IR Competencies

Human literacy <ol style="list-style-type: none"> 1. Empathy 2. Communication 3. Collaboration 4. Emotional intelligence 5. Networking & influencing 6. Cultural agility 7. Ethics 8. Confidence 	Digital fluency <ol style="list-style-type: none"> 1. Data fluency 2. Technology fluency 3. Coding 4. Digital storytelling 5. Critical consumption of information
Hyper-learning <ol style="list-style-type: none"> 1. Fast, continuous learning 2. Learning, unlearning, and re-learning 3. Reflecting on learning 4. Deliberate practice 	Systems & design thinking <ol style="list-style-type: none"> 1. Critical thinking and problem-solving 2. Creativity/ innovation/imagination 3. Thinking holistically 4. Agile frameworks 5. Change management 6. Entrepreneurship

Human literacy

As artificial intelligence advances, rendering many human skills unnecessary, higher education might want to shift its focus to developing skillsets and mindsets that computers cannot easily mimic. While technical skills meet the entry-level requirements for jobs, our social skills will lift us to the status of stars in the future (Neumeier, 2013, 82). In the age of robots and artificial intelligence, theorists have consistently highlighted human literacy as our key differentiator from machines (Aoun, 2017; Seldon & Abidoye, 2018; Tse et al. 2019). Human literacy takes us beyond the ability to communicate and collaborate, focusing on developing the knowledge and skillset to not only understand oneself and others but to meaningfully connect with them. The components of human literacy include *empathy, communication and collaboration, emotional intelligence, networking and influencing, cultural agility, ethics, and confidence*.

The key component of human literacy is *empathy*. Empathy, the ability to discover what another person thinks and feels to give an appropriate response, is the foundational skill that increasingly makes people valuable as technology advances (De Waal, 2009; Neumeier, 2013; Colvin, 2015; Aoun, 2017). People have traditionally developed the ability to empathize outside the realm of formal education; however, as empathy scores among American college students between 1979 and 2009, and especially after 2000, have strongly decreased (Colvin, 2015; Konrath, Chopik & Hsing, 2014), universities might consider including empathy training in students' professional development programs. Indeed, people can develop empathic abilities (Colvin, 2015, 85; Gotto, 2013).

Researchers still consider *communication* (Tse et al., 2019) and *collaboration* skills (Davidson, 2011; van Eijl et al., 2017) as pertinent components of human literacy since most of "the great advances of the future will not come from a single man or woman, but from a concentrated effort of a group" (Neumeier, 2013, 30). One cannot express empathy or collaborate without communication. Through collaboration and fusing of different

perspectives from individuals with various disciplinary backgrounds, we are seeing different contexts and typically come up with better solutions than if we worked individually.

Effective collaboration requires *emotional intelligence* (EQ), the ability to identify and manage one's own emotions and the emotions of others (Davidson, 2017). Teamwork invariably involves resolving conflicting viewpoints, which is challenging without EQ. According to a University of California Berkeley study, EQ abilities are four times more important in a workplace than IQ (Neumeier, 2013, 82).

In addition to emotional intelligence, another key ability is understanding how to thrive within a *network* of others (Davidson, 2011) and *influencing others*, as innovation often requires the implementation of unpopular ideas without alienating others or demotivating a team (Neumeier, 2013, 152). Given our global economy, the prevalence of working across borders, and different corporate cultures, *cultural agility*, or the ability to perform successfully in cross-cultural situations, is also required of the twenty-first-century worker (Aoun, 2017). The essence of being human is to make moral choices, thus all students should get a grounding in *ethics*, especially as related to the dilemmas created by the 4IR (Davidson, 2011; Aoun, 2017; Seldon & Abidoye, 2018). Finally, future generations will need *confidence* to boldly take on the challenges of the complex world we live in as well as the needed risks (Tse et al., 2019).

Digital fluency

Technology is the driving force of human society. "McKinsey suggests that by 2030, the workforce will spend 55% more time using technical skills than in 2016" (McDonald, 2019). Therefore, digital fluency is yet another key competency to develop for the future, as suggested by, e.g., Davidson (2011), Aoun (2017), van Eijl et al. (2017), Zimmerman (2019), and Tse et al. (2019). Digital fluency requires *data literacy*, *understanding of various technologies* and their affordances, some *coding* skills, *digital storytelling*, and the ability to *consume information critically*.

Data literacy will enable us to analyze the big data generated by billions of smart objects and systems to make better decisions, capturing new markets or market shares (Davidson, 2011; Aoun, 2017). *Understanding technology* will help us deploy better systems to solve the problems at hand or capturing opportunities (Davidson, 2011, Aoun, 2017). While not everyone needs to be a programmer, understanding the conceptual elements of *coding* will enable us to communicate our needs better to those who code and to sharpen critical thinking skills. Coding will allow us to begin interacting with technology in a more constructive way (Aoun, 2017; Tse et al., 2019). *Digital storytelling* skills will enable us to more effectively share the narrative and information we want to get across, which often needs to be presented digitally (Davidson, 2011; Aoun, 2017). Finally, the ability to *consume information critically* is key to finding credible sources in the sea of information and misinformation. Critical thinking has a long history of being recognized as a key skill to develop in honors education as well.

Hyper-learning

Lewis Perelman (1992) originally coined the term *hyper-learning* to mean self-directed, non-linear, *fast*, and *continuous learning* using technology to extract new insights from a maze of

information and experiences, enhancing our intelligence. Hyper-learning benefits from a “growth mindset” (Dweck, 2007), the belief that one can learn and increase the capacity to learn by *reflecting on the learning* methods and corresponding accomplishments. Hess and Gozdz (2018) re-examined the hyper-learning idea, suggesting that becoming a hyper-learning community is the future of business during the 4IR and beyond.

As we currently live in a world of constant change, with the COVID-19 pandemic underscoring this point, learning how to learn is a key literacy. This ability gives a person the power to apply the principles of learning to new disciplines, giving one the confidence that anything is possible to learn. This skill requires individuals to develop a new concept of knowledge—one that sees it as a process rather than a thing, *constantly learning, unlearning, and re-learning* (Davidson, 2011).

When learning occurs in the domain of one’s passion with focus and competent guidance, the mastery of the field often follows. “The path to mastery is the journey to yourself” (Neumeier, 2013, 231), and thus it is highly relevant in honors education that aims to build self-awareness.

Systems and design thinking

Systems and design thinking competencies take the students beyond the development of critical thinking skills and creativity, all widely advocated in the recent literature on future-proofing one’s career (Neumeier, 2013; Aoun, 2017; Seldon & Abidoye, 2018; Tse et al. 2019). As Arnold and Wade (2015) state, “*systems thinking* is a set of synergistic analytic skills used to improve the capability of identifying and understanding systems, predicting their behaviors, and devising modifications to them to produce desired effects” (p. 675). Similarly, according to IDEOU (n.d.), “*design thinking* is a human-centered approach to innovation that draws from the designer’s toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success.” As the problems facing the world are complex and consumers become accustomed to personalized offerings exceeding their expectations, both systems thinking (Senge, 2006) and design thinking are necessary competencies to develop among university students. Systems thinking requires *critical thinking and problem-solving skills, thinking holistically, embracing ambiguity, and implementing the agile and change management frameworks* (Alexander, 2018; Meister, 2019). Design thinking builds upon our empathy and *creativity* skills, fostering curiosity, *imagination*, divergent thinking, playfulness, and wonder (Staley, 2019, 128), key right-brain skills that are harder to automate. Creativity, imagination, and design thinking are the keystones of *entrepreneurship*, which generates original solutions to challenges or opportunities. Systems and design thinking take critical thinking and creativity skills development, common honors curricular goals, and elevate them to 4IR relevance by allowing individuals to tackle harder problems with better human insights.

5. The W-shaped 4IR competency model

Literature is full of a letter- or symbol-based metaphors that describe the type of person one might find in a workplace, based on his or her expertise and skills. The most commonly discussed skillset letters in the literature include a hyphen/dash (Sharma, 2018), an “I” (Groll, n.d.), a “T” (Fay, 2017; Hansen, 2010), a “π” (Sharma, 2018), and most recently, a “Z” (Meister, 2019). Given the prevailing focus on letters or symbols to describe a model, we

were also compelled to select a letter for our competency model. We chose the letter “W,” as it conveniently could stand for “win” in the age of 4IR. The “W”-shaped competency model aims to develop people with imagination and vision, who can collaborate to design innovative outcomes, filter non-essential information, and focus on the key problems at hand, while just-in-time filling-in important expertise gaps.

The W-shaped model combines competencies, which typically no single program offers, and therefore could be well-suited to honors interdisciplinary curricula. The model calls for multi-disciplinary insights, skillsets, and mindsets typically developed across a variety of fields, such as humanities, sciences, educational sciences, business, and art. The W-shaped-skilled individuals will have, besides deep functional expertise in at least one field of study, the needed attributes to develop into superstar employees of the future—individuals not defined by their title, who can see the big picture and details, who show real grit (Duckworth et al., 2007), are kind, and move the needle in the organization (Holmes, 2016).

Figure 1. The W-shaped 4IR Competency Model



Source: Jones, 2019

6. Conclusion

The recent changes in technology adoption, accelerated by the COVID-19 pandemic, have created a new economic reality that calls for immediate action in the world of higher education and particularly in honors programs, which aim to offer innovative curricula. While popular media made us believe that AI is going to take over our jobs, the truth is that AI will simply change the nature of our work, eliminating some jobs, and creating new ones. The new jobs will require different competencies than what many institutions of higher learning have been developing thus far. In the future, humans and technology should work cooperatively, which has the potential to make a better world for all of us. It is time for universities to realize the urgency of the impact of new technologies on the labor markets, rethinking value propositions. The W-shaped professional competency model may offer an avenue for consideration to some higher education institutions.

An important limitation of this paper to note is that it presents a prediction for the future, based on common beliefs among educational futurists from the developed countries. In

developing countries, the future may not reflect the Fourth Industrial Revolution reality and therefore, the objectives for higher education and honors programs in those countries might be more traditional. Additionally, the future is uncertain, as we have seen with the sudden outbreak of the COVID-19 virus and the resulting changes in the world around us. The current W-model key competency predictions are based on the recent, observable trends before COVID-19. As new trends become identified, the W-model will need to be refined and updated, as needed. Additionally, the model should not be perceived as a dictate in restructuring curricula in higher education where different choices must be made for each study program depending on situational factors.

Honors programs can and should, however, play a key role in the curriculum innovation process. These are the places within universities where there is room to experiment with new content, new assignments, and new teaching methods. In a recent study (van Eijl et al. 2017), students from three honors programs from different institutions were asked if their honors programs stimulated them to acquire the twenty-first-century skills as formulated by Binkley et al. (2010), which overlap the competencies of the W-model. Nearly all students replied that their honors programs encouraged them more to acquire some of these skills and more so than their regular program. In an ongoing study, van Eijl and Pilot (in preparation) found that 4IR competencies were an important part of the efforts of teachers and institutions to transfer the expertise and goals of the honors programs into the regular programs in experiments with honors as a laboratory of innovation.

Our paper is a call to action for universities to address the skills gap challenge of their graduates. Let us begin with honors programs to explore, design, and institutionalize the educational paths for the future explored in this paper. Revolutionary changes typically start with the grass-roots movement (Perelman, 1992), so we urge honors educators and administrators around the world to adopt curricula that will make their graduates robot-proof, able to “win” in the new economy for decades to come.

References

- Alexander, M. (2018). Agile project management: 12 key principles, 4 big hurdles. *CIO*. June 18. Retrieved from: <https://www.cio.com/article/3156998/agile-project-management-a-beginners-guide.html>
- Aoun, J. (2017). *Higher Education in the Age of Artificial Intelligence*. Cambridge, MA: The MIT Press.
- Arbesman, S. (2013). *The half-life of facts: Why everything we know has an expiration date*. New York, NY: Penguin.
- Arnold, R. & Wade, J. (2015). A definition of systems thinking: a systems approach. *Procedia Computer Science* 44, 669 – 678.

Beaudry, P., Green, D.A., & Sand, B.M. (2013). *The great reversal in the demand for skill and cognitive tasks*. National Bureau of Economic Research, NBER Working Paper Nr. 18901. Retrieved from: <http://www.nber.org/papers/w18901>

Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M. & Rumble, M. (2010). *Defining 21st century skills*. Melbourne: University of Melbourne.

Campbell, T.A. (2018). A phenomenological study of business graduates' employment experiences in the changing economy *Journal for labour market research* 52:4
<https://doi.org/10.1186/s12651-018-0238-8>

Colvin, G. (2015). *Humans are underrated. What high achievers know that brilliant machines never will*. Boston, MA: Nicholas Brealey Publishing

Davidson, C. (2011). *Now you see it: how technology and brain science will transform schools and businesses for the 21st century*. New York, NY: Penguin Books

Davidson (2017). *The new education: how to revolutionize the university to prepare students for a world in flux*. New York, NY: Basic Books

De Waal, F. (2009). *The age of empathy: Nature's lessons for a kinder society*. New York, NY: Random House LLC

Duckworth, A.L., Peterson, C., Matthews, M.D. & Kelly, D.R. (2007). Grit. Perseverance and passion for long-term goals. *Journal of Personality and Social psychology*, 92, 1087-1101. TEDtalk:
https://www.ted.com/talks/angela_lee_duckworth_grit_the_power_of_passion_and_perseverance

Dweck, C. (2007). *Mindset: The new psychology of success*. New York, NY: Ballantine Books.

Eijl, P.J. van, & Pilot, A. (Red.) (2016). *The Honours Experience, talentontwikkeling door de ogen van de honoursstudent*. [Talent development through the eyes of honors students] Hogeschool Rotterdam uitgeverij. Rotterdam, The Netherlands. Retrieved from:
https://www.researchgate.net/publication/305213336_The_Honours_Experience_Talentontwikkeling_door_de_ogen_van_de_honoursstudent and
https://www.researchgate.net/publication/305215269_The_honours_experience_talent_development_through_the_eyes_of_honours_students_synopsis

Eijl, P.J. van, Peeters, T., Moesker, H., Dillen, A., Pilot, A. & Ginkel, S. van (2017). Honors programs as forerunner for 21st century skills? *Journal of the European Honors Council* 1 (2), 8. <https://doi.org/10.31378/jehc.25>

Eijl, P.J. van, and Pilot, A (in preparation). *Transfer of honors innovations to regular programs*. Report. Utrecht University, The Netherlands.

Eliot, S.W. (2017). *Computers and the Future of Skill Demand*. Educational Research and Innovation. OECD. Retrieved from: <http://www.oecd.org/education/computers-and-the-future-of-skill-demand-9789264284395-en.htm>

Fay, G. (2017). *X, I or T - What shape are you, and do you need to cross-skill before it's too late?* Retrieved from: https://chiefexecutive.net/ideo-ceo-tim-brown-t-shaped-stars-the-backbone-of-ideoaes-collaborative-culture_trashed/

Frey, C.B. & Osborne, M.A. (2013). *The future of employment. How susceptible are jobs to computerization?*, Oxford: Oxford Martin Publication.

Gotto, A.M. (2013). Teaching Empathy in Medical School. *Huffington Post*, 4 September 2013.

Groll, J. (n.d.). *From I-shaped to T-shaped – why DevOps professionals need to be multi-skilled*: Retrieved from: <https://devopsinstitute.com/2017/11/15/from-i-shaped-to-t-shaped-why-devops-professionals-need-to-be-multi-skilled/>

Grainger, P. & Bandura, R. (2019). Rethinking Pathways to Employment: Technical and Vocational Training for The Digital Age. G20 Insights. G20 Japan. Retrieved from: <https://www.g20-insights.org/wp-content/uploads/2019/06/rethinking-pathways-to-employment-technical-and-vocational-training-for-the-digital-age-2-1560508031.pdf>

Hagel, J., Brown, J.S., & Wooll, M. (2019). Skills change, but capabilities endure Why fostering human capabilities first might be more important than reskilling in the future of work. *Deloitte Insights*. August 30, 2019. Retrieved from: <https://www2.deloitte.com/us/en/insights/focus/technology-and-the-future-of-work/future-of-work-human-capabilities.html>

Hansen, M. (2010). IDEO CEO Tim Brown: T-Shaped Stars: The Backbone of IDEO's Collaborative Culture. *Chief Executive*. Retrieved from: https://chiefexecutive.net/ideo-ceo-tim-brown-t-shaped-stars-the-backbone-of-ideoaes-collaborative-culture_trashed/

Hess, E. & Gozdz, K. (2018). Becoming a hyper-learning community: the future of business. *UVA Darden Ideas to Action*. Retrieved from: <https://ideas.darden.virginia.edu/becoming-a-hyper-learning-community-the-future-of-business>

Heugten, P. van, Heijne-Penninga, M., Paans, W. Wolfensberger, M.V.C. (2016). Characteristics of highly talented international business professionals defined: Qualitative study among international business professionals. *European Journal of Training and Development* 40,2, 58-73

Holmes, R. (2016). Why every business should be looking to hire unicorns. *Financial Times*. October 5. Retrieved from: <https://business.financialpost.com/entrepreneur/fp-startups/why-every-business-should-be-looking-to-hire-unicorns>

IBA Global Employment Institute (2017). *Artificial Intelligence and Robotics and Their Impact on the Workplace*. Retrieved from:

<https://www.ibanet.org/Document/Default.aspx?DocumentUid=c06aa1a3-d355>

IDEOU (n.d.). Design thinking. *IDEOU*. Retrieved from:

<https://www.ideo.com/pages/design-thinking>

Jones, B. (2016). Toward a science of honors education. *Journal of the National Collegiate Honors Council* --Online Archive. 516. Retrieved from:

<http://digitalcommons.unl.edu/nchcjournal/516>

Jones, B. (2019). *W for the win in the robotic age*. Presentation to the International Board of Visitors, Neeley School of Business, Texas Christian University. May 3, 2019.

Kaplan, J. (2015). *Humans need not apply: a guide to wealth & work in the age of artificial intelligence*. New Haven, CT: Yale University Press

Konrath, S.H. Chopik, W.J. & Hsing, C.K. (2014). Changes in Adult Attachment Styles in American College Students Over Time, A Meta-Analysis. *Personal and Social Psychology Review* 15(2), 180-198.

Kosslyn, S.M. (2019). Are you developing skills that won't be automated? 25 September 2019, *Harvard Business Review*. Retrieved from: [https://hbr.org/2019/09/are-you-developing-skills-that-wont-be-](https://hbr.org/2019/09/are-you-developing-skills-that-wont-be-automated?utm_campaign=hbr&utm_medium=social&utm_source=linkedin)

[automated?utm_campaign=hbr&utm_medium=social&utm_source=linkedin](https://hbr.org/2019/09/are-you-developing-skills-that-wont-be-automated?utm_campaign=hbr&utm_medium=social&utm_source=linkedin)

Lappia, J. (2015). *Intelligent interveniëren. Docentprofessionalisering voor honoursonderwijs*. [Intelligent interventions. Faculty Development for Honors Education](PhD-thesis Twente University, The Netherlands). Rotterdam, The Netherlands: Hogeschool Rotterdam Uitgeverij

Lappia, J., Weerheijm, R., Eijl, P.J. van & Pilot, A. (2014). Gesprekken met honoursstudenten. Over persoonlijke en professionele ontwikkeling. [Interviews with honors students. About personal and professional developments] Inspiratiebundel. Hogeschool Rotterdam Uitgeverij, Rotterdam, The Netherlands. Retrieved from:

https://www.researchgate.net/publication/273762380_Gesprekken_met_honoursstudenten_Over_persoonlijke_en_professionele_ontwikkeling

Levy, F. & Murnane, R. (2012). The new division of labor: how computers are creating the next job market. *The New Division of Labor: How Computers Are Creating the Next Job Market*. 1-174.

McDonald, T. (2019). To prepare for a future where AI will likely disrupt entire industries, some say we'll have to rethink how we educate future generations. *BBC*, January 27, 2019. Retrieved from: <https://www.bbc.com/worklife/article/20190127-humanics-a-way-to-robot-proof-your-career>

McKinsey Global Institute, (2019). *The future of work in America: People and places, today and tomorrow*. Retrieved from: <https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-in-america-people-and-places-today-and-tomorrow>

Meister, J. (2019). The future of work: humans + gigs + robots are the new blended workforce. *Forbes*, March 14. Retrieved from: <https://www.forbes.com/sites/jeannemeister/2019/03/14/the-future-of-work-humans-gigs-robots-are-the-new-blended-workforce/#c8d83c7384c5>

Mezirov, J. (1994). Understanding transformation theory. *Adult Education Quarterly*, 44(4), 222–232. Retrieved from: <https://doi.org/10.1177/074171369404400403> and <https://www.newdemocracy.com.au/wp-content/uploads/2020/05/Understanding-Transformation-Theory-%E2%80%93-Mezirow-1994.pdf>

NCHC (National Collegiate Honors Council). (2017). *Basic characteristics of a fully developed honors program*. Retrieved from: <https://www.nchchonors.org/directors-faculty/definition-of-honors-education>

Neumeier, M. (2013). *Meta-skills: five talents for the robotic age*. New Riders.

Payne, G., & Williams, M. (2005) Generalization in qualitative research. *Sociology* 39 (2), 295-314.

Perelman, L. (1992). *School's out: hyperlearning, the new technology, and the end of education*. New York: William Morrow

Pilot, A. (2020). Book Review of J.E. Aoun, Robot-Proof: Higher Education in the Age of Artificial Intelligence. *Journal of The European Honors Council* 4(1), 6.
DOI: <https://doi.org/10.31378/jehc.131>

Sabatini, F., & Sarracino, F. (2014). *Will Facebook save or destroy social capital? An empirical investigation into the effect of online interactions on trust and networks*. GESIS-Working Papers 2014|30. Retrieved from: <https://www.ssoar.info/ssoar/handle/document/38167>.

Schwab, K. (2017). *The fourth industrial revolution*. New York, NY: Crown Business

Schwab, K. (2016). *The Fourth Industrial Revolution: what it means, how to respond*. Retrieved from: <https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>

Seldon, A. & Abidoye, O. (2018). *The fourth education revolution: will artificial intelligence liberate or infantilise humanity?* Buckingham, UK: The University of Buckingham Press

Senge, P. (2006). *The Fifth Discipline: The art and practice of the learning organization*. (2nd edition). New York: Doubleday.

- Sharma, G. (2018). *Which letter-shaped employee you are?* Retrieved from: <https://www.linkedin.com/pulse/which-letter-shaped-employee-you-gaurav-sharma/>
- Staley, D. (2019). *Alternative universities: a speculative design for innovation in higher education*. Baltimore, MD: Johns Hopkins University Press
- Stevens, A. & Strauss, L. (2018). *Chasing digital: a playbook for the new economy*. Melbourne, Australia: Wiley
- Thomas, J. & Brown, J.S. (2011). *A new culture of learning: cultivating the imagination for a world of constant change*. Retrieved from: <http://www.newcultureoflearning.com/newcultureoflearning.pdf>
- Toffler, A. (1970). *Future shock*. New York, NY: Bantam Books
- Tse, T. Esposito, M. & Goh, M. (2019). *The AI republic. Building the nexus between human and intelligent automation*. Austin, TX: Lioncrest Publishing
- Waal, F. de (2009). *Een tijd voor empathie*. [The age of empathy: Nature's lessons for a kinder society] Amsterdam, The Netherlands: Uitgeverij Contact
- Went, R., Kremer, M. & Knottnerus, A. (Eds.) (2015). *Mastering the robots, the future of work in the second machine age*. The Hague (The Netherlands): The Netherlands Scientific Council for Government Policy. Retrieved from: http://englishbulletin.adapt.it/wp-content/uploads/2015/12/Mastering_the_Robot_Web.pdf
- World Economic Forum (2018). *Towards a reskilling revolution, a future of jobs for all*. Geneva: World Economic Forum. Retrieved from: http://www3.weforum.org/docs/WEF_FOW_Reskilling_Revolution.pdf
- Wolfensberger, M. V.C., Eijl, P. van, & Pilot, A. (2012). Laboratories for educational innovation: honors programs in the Netherlands. *Journal of the National Collegiate Honors Council* --Online Archive. 360. Retrieved from: <http://digitalcommons.unl.edu/nchcjournal/360>
- Wolfensberger, M. V. (2015). *Talent development in European higher education: honors programs in the Benelux, Nordic, and German-speaking countries*. Springer. Retrieved from: <http://link.springer.com/book/10.1007%2F978-3-319-12919-8>
- World Economic Forum (2018). *Towards a reskilling revolution, a future of jobs for all*. Geneva: World Economic Forum. Retrieved from: http://www3.weforum.org/docs/WEF_FOW_Reskilling_Revolution.pdf
- Xing, B. & Marwala, T. (2017). Implications of the fourth industrial age for higher education (2017). *The Thinker*. 37, 10-15. Retrieved from: <https://ssrn.com/abstract=3225331>

Zimmerman, S. (2019). Digital fluency: A key competency to perform in the Digital Age? *Academy of Management Proceedings*.

Zubizarreta, J. (2020). Honors in the time of corona. *Journal of the European Honors Council*, 4,1, 7. DOI: <https://doi.org/10.31378/jehc.139>



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Note

Academic skills in the screenish era

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1. Introduction

In response to the changing world after World War II, two American college presidents published books on the future of higher education in the US. The first, recognized by many honors professionals, was Frank Aydelotte's *Breaking the Academic Lockstep*. The second, perhaps less familiar, was *Vitalizing Liberal Education* by Algo Henderson, then President of Antioch College.

We remember Aydelotte today as having inspired honors programs and colleges across the country. Henderson, on the other hand, is remembered for his insistence that the entire college environment be directed towards educational change in the student; his legacy includes student governance, internships and co-ops and 'live-learn' communities.

Both thinkers sought to revolutionize the educational system so that it could lead the technological and cultural changes of the post-war world. They both prized engaged learning and individualization of the collegiate experience. And they both accepted that their students would face a world that was different in kind to the one for which they were trained.

Today, we face an analogous set of challenges: a new technological world-order and new forms of mass-education. But unlike Aydelotte and Henderson, we have largely ignored the cultural changes necessary to prepare students for a world unlike the one for which we were prepared. I believe that honors educators, thanks to the legacy of individualized learning celebrated by Aydelotte and Henderson, have the power to lead this new era, if they are willing to trust our students.

Digital technology allows for perfect replication of information. Non-digital replicas always have some imperfection, noise, or “static” introduced in the replication process. Digital replication does not have this imperfection—a digital file is identical to all of its copies.

This perfect replication of information implies a number of interrelated capabilities. First, by copying information from one physical device to another as they wear out, information is practically permanent. Second, storage of information is independent of the medium; a video can be stored on a hard drive alongside a text document. Third, information can be searched, classified, and compared quickly. And fourth, as networks of digital copying have increased in both speed and scope, information has become a distributed, not centralized, network.

The larger culture has begun to understand these implications—the European Union’s General Data Protection Regulation (commonly known as GDPR) laws, for example, addresses the problem of practically permanent storage. But the academy has not shown many signs of adapting to this new world.

2. ‘Bookish’ and ‘screenish’

Most faculty probably envision their ideal life as surrounded by books—they are what Ivan Illich called ‘bookish’ (Illich, 1993). In the UK, one does not “study” for a degree, one “reads” for that degree. Libraries frequently occupy the “academic heart” of a campus and have the appropriate architecture to match. Members of the academy today are the products of a European intellectual tradition dating back at least 8 centuries that identifies “being educated” with being intimately familiar with books. This bookishness will not be true in our students’ lifetimes, if it is even true now.

Don’t get me wrong—books are wonderful devices to store information. I love my books. But books have major shortcomings when compared to digital technology. Books do not replicate. The best version is *always* the original. They are limited to a small set of media: text, images, charts, tables. They are not easy to index or search. And proximity matters—to use them, one must be physically in the same location.

Most of us in higher education—especially those of us old enough to have leadership positions—were trained in the bookish era, and, hence, we tend to think of knowledge using the model of books. Primary sources rule. Proximity matters—the closer one is to the authority on a subject matter, the better or more reliable one’s knowledge is. Information retrieval is inefficient; therefore, there is great value in summary documents (textbooks) and lexical memorization. None of these are necessarily true of knowledge. They are extrapolations from the metaphor of books, yet hard-baked in the culture of academia.

Current students are not bookish. They are, to coin an awkward word, “screenish.” But this does not mean that the skills we teach have no place in the screenish world. These skills are, witnessing the influence of social media on American politics, now more important than ever. But it does mean that instead of teaching our same old bookish ways, we should shift our metaphors about how knowledge works.

An educated person in the screenish age must be able to navigate and utilize networks of interrelated bits of information, not just texts but blog posts, YouTube channels, and podcasts. In order to contribute to the American democratic society, the contemporary civic-minded American should understand how Wikipedia, snopes.com and Reddit contribute to public discourse, and how 4chan and related sites seek to manipulate it.

Consider critical thinking as an example. Most actual critical thinking instruction focuses on classic textual fallacies, including reliability of experts. The newspaper opinion editorial is the typical example of public argumentation. Indeed, the Ennis-Wier critical thinking essay test (Ennis & Wier, 1995) asks students to analyze a fictional op-ed, and most of the “make-an-argument” and “break-an-argument” tasks in the Collegiate Learning Assessment (CLA) and the post-2016 version of the Student Aptitude Test (SAT) are framed in similar ways. Critical thinking about texts requires validating sources and watching for distractions, non-sequiturs, and equivocations. Critical thinking for the digital age is similar, requiring understanding photoshopped images, deep fakes, and Russian trolls.

3. Changing skills

Information in the digital age is multi-modal, distributed, permanent, searchable and fast. And most of us were taught the skills to succeed in a world where information was textual, centralized, limited, browsable but not searchable, and slow. Academic skills must change.

Consider, by way of example, spelling. Recently, my mother found a box of class materials in her attic from when I was in 9th grade. It contained the results of my “career-placement” test. As a child, I was—and to be honest, still am—a horrible speller. So, while my placement test recorded a 99th percentile in “Abstract Reasoning,” I scored only a 40th percentile in spelling. As a result, all academic jobs were precluded from my inventory of potential future careers. In 1988, spelling was a requirement for a life of letters.

When I entered college in 1992, spellcheck was something one ran after the paper was finished, as a final check before printing. The feedback loop between my misspelling and correction offered by spellcheck was too long to teach me anything. MS Word introduced auto-spellcheck sometime around 1993, and my spelling skills quickly improved.

By changing a skill that was considered a necessary requirement to one that could be achieved with the use of assistive technology, auto-spellcheck opened up academic careers to me and many like me. Today, requiring good spelling in a job description would be analogous to requiring perfect eyesight. Assistive technology is so ubiquitous that insisting on unassisted perfection would be prejudiced and unfair.

Digital technology will, I suspect, do the same to many of the skills we treat as essential to our fields today. Students in science, technology, engineering and math (in the US, these are identified with the acronym “STEM”) fields are often required to memorize huge lists of terminology. Assistive technologies for memory may well make this skill obsolete. In the “screenish” age, the skills of organizing and labeling information are far more important than mnemonic devices and flashcards.

4. Transformation

If higher education can transform for the needs of this new era, we must, in the words of Aydelotte (1944), ‘clarify its aims and improve its quality’ (p. 7). The aim of education is always to prepare students for their era, not ours. And, as Henderson (1944) says, ‘[the student] has to be taught how to search for knowledge on his own, how to utilize this knowledge in the thinking process, and *then how to apply the results of this thinking in life’s activities for some individual and social purpose*’ (p. 113).

Our students need to be prepared for the brave new screenish world, not the bookish world for which we were trained. They need the skills necessary to contribute to knowledge in a global distributed informational environment. They need to view knowledge as a distributed, multi-modal network. Knowledge in this model is not something one owns or possesses but rather something shared that one can retrieve quickly when necessary.

Honors is already frequently structured to encourage students to learn on their own and to apply what they have learned. They are masters of the media of the screenish world. We are not. So be it. Let us use the honors tradition of allowing our students to shape their education to create a system of education for the future, not the past.

This will require a cultural change among faculty and the leaders of honors—but no more so than the one envisioned by Aydelotte and Henderson. Educate the students *individually* for *their* benefit and embrace the models of knowledge that are relevant in their world, not ours.

References

Aydelotte, F. (1944). *Breaking the Academic Lock Step*. New York, Harper.

Ennis, R., Weir, E. (1995). *The Ennis-Weir Critical Thinking Essay Test*, Pacific Grove, CA, Midwest Publications

Henderson, A. D. (1944). *Vitalizing Liberal Education*. Harper & Brothers.

Illich, I. (1993). *In the Vineyard of the Text*. University of Chicago.

Paper

The digital common read: Creating a space for authentic engagement with social annotation

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Abstract

This paper describes a new approach to the common read at the University of New Haven, USA. Faculty and students choose a text in the public domain, place it on the web, and ask incoming first-year honors students to annotate the text collaboratively using Hypothesis. The choice of text, placement on the web, and editorial introduction can all affect rates of participation and the type of annotations that students choose to share. This method is a low-cost way of creating space for a social intellectual experience prior to arriving on campus.

Keywords: common read; social annotation; digital humanities; first-year experience

1. Introduction

Colleges and universities in the United States have long sought ways to help incoming first-year students transition from the relatively narrow horizons of high school to the intellectual curiosity, methods of inquiry, and traditions of academic debate and discussion that lie at the heart of the liberal arts tradition. One tool used to achieve this goal, with varying degrees of success, is the common read, i.e. the selection of a book that all incoming, first-year students will read over the summer. Committees of faculty and administrators choose each year's text, and institutions often provide the book to students free of charge, a not inconsiderable expense (Kennedy and Boyd, 2018). Typically, the individual, voluntary reading completed by students over the summer is supported by public lectures in the Fall semester or the integration of the text into first-year writing or other courses. In its ideal Platonic form, the common read has much to recommend it; the rich and challenging text selected by faculty provides students with a common intellectual experience prior to arrival on campus, introduces students to a new idea or makes them see something familiar in a new way, and helps students see the importance of sharing ideas. The experience teaches

students that the life of the mind requires time for individual work and reflection but only comes to full fruition in communication with others.

In our imperfect world, however, the common read rarely lives up to expectations. For committee members who struggle to get students to read assigned texts in class, the temptation to choose easily accessible texts that promote uplifting, but clichéd, messages is high. In the last few years of our university's common read program, the texts chosen included titles such as *Start Something that Matters* and *Make the Impossible Possible*, books with messages so anodyne that neither faculty nor students could find anything to discuss, much less debate. Given the potential for profit from the popularity of common read programs on university campuses, it is perhaps unsurprising that publishers promote particular books to the committees tasked with selecting each year's text. We refer to this particular sector of educational publishing as the Common Read Industrial Complex (CRIC), a conglomeration of publishers and booking agencies offering unnecessarily expensive solutions to the challenges facing university common read committees. The allure of pre-selected, safe texts and the convenience they offer is considerable. However, despite our university's repeated selection of these heavily marketed texts, student participation rates were poor, faculty refused to use the books in their courses (for good reason), and the expense of the books and guest speakers became increasingly hard to justify.

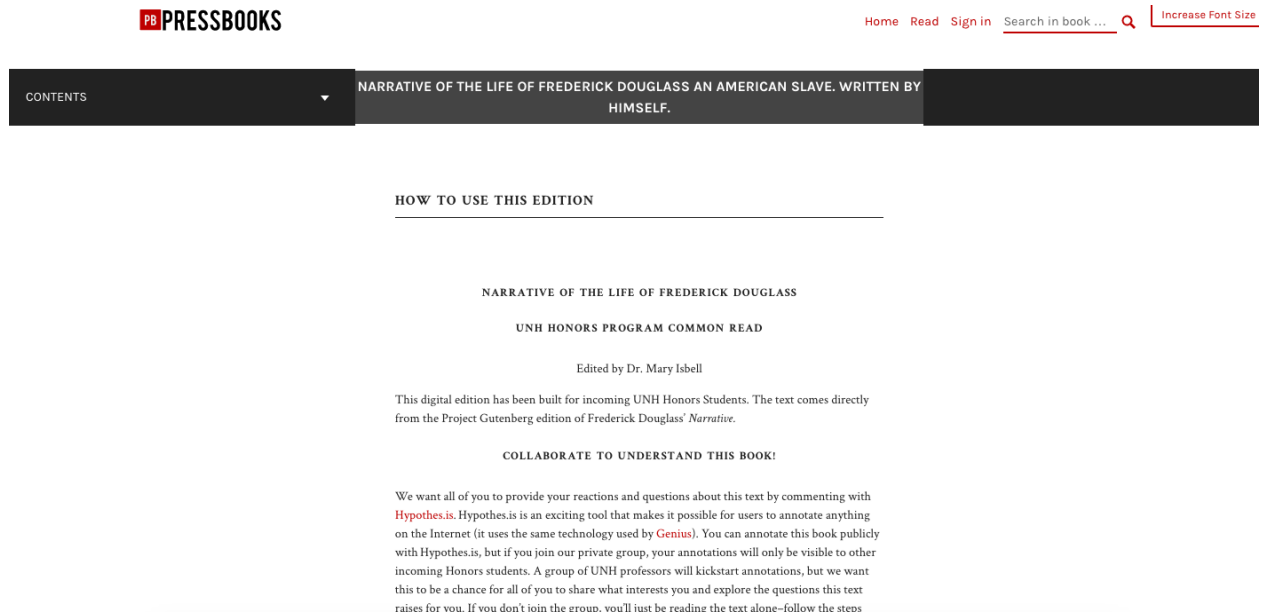
2. Methods

Rather than let the program die altogether, we (the authors) decided in 2016 to focus on incoming honors students and turned to the concept of social annotation in a digital environment to reimagine the common read as an interactive experience, one in which students read a text together and can see in real time the thoughts and interpretations of their peers. Our program was inspired by our experimentation with Annotation Studio, a suite of tools created by the Massachusetts Institute of Technology's Hyperstudio, as well as Robin DeRosa's *Open Anthology of Earlier American Literature*, a project that recreated *The Heath Anthology* by editing and hosting common domain texts on Pressbooks. DeRosa's project can be placed in the context of scholarship on Computer-Supported Collaborative Learning, a field Hafeed Zarzour and Mokhtar Sellami characterize as asking 'how learning can be enhanced through computer mediated collaboration' (Zarzour and Sellami, 2017, p. 383).

Our idea was to choose texts in the public domain, place them on a Pressbooks site, and invite incoming honors students to annotate the text using Hypothesis, a browser plug-in that creates a layer of annotation over the internet. Using Hypothesis, students could highlight text, make annotations, and reply to comments left by others. Recent scholarship has begun to study social annotation tools like Hypothesis to pinpoint how they encourage knowledge construction for students (Sun and Gao, 2017) and how these tools make visible to instructors the way students read (Sprouse, 2018). For our purposes, it was important that the tool allows the creation of closed groups so that only members can read each other's annotations. This new approach did limit us to literature in the public domain, but there were plenty of good options. We also looked for shorter texts in order to maintain a critical density of commentary; were students to annotate a 400-page novel, the annotations would be so far dispersed that the social and interactive nature of the experience would be lost. Our first selection was [*The Narrative of the Life of Frederick Douglass*](#), a powerful and moving memoir of Douglass' experience as a young enslaved man before his escape in 1838

(Figure 1). The choice was timely, as that July witnessed large Black Lives Matter protests against the murders of Alton Sterling and Philando Castile at the hands of police officers.

Figure 1. Landing Page for the 2016 Honors Program Common Read



We contacted incoming first-year honors students over the summer with an email invitation to join our digital common read. The email included a link to our Pressbooks site and a video that explained how to install Hypothesis and use the edition. The text itself came from Project Gutenberg. We seeded the text with a handful of annotations so that students could see what they looked like but realized that those were not necessary—students took to Hypothesis more quickly and easily than expected. Students engaged enthusiastically with the text and each other before ever having met in person.

Encouraged by these results, we (the authors) co-taught an honors course the following Spring semester in which the final project was to create webpages for the future of the Honors Program Common Read. Students chose a public domain text, created a Pressbooks site to host it, and wrote an editorial introduction designed to hook readers. Those student projects led to our choice of texts over the next three years: Robert Louis Stevenson's [The Strange Case of Dr. Jekyll and Mr. Hyde](#) (Figure 2); Hans Christian Andersen's ["The Little Mermaid"](#) (Figure 3); and Sophocles' *Antigone* (Figure 4). Hypothesis recently added Blackboard integration, so, for 2019, we built the site in Blackboard to remove the need for students to create separate Hypothesis accounts and to prevent the common mistake of leaving annotations in the default 'public' forum rather than the private common read group in Hypothesis. The hope is that Blackboard integration will make the process more streamlined for students, but one unfortunate consequence is that the page cannot be shared with others in the same way.

Figure 2. Landing Page for 2017 Honors Program Common Read

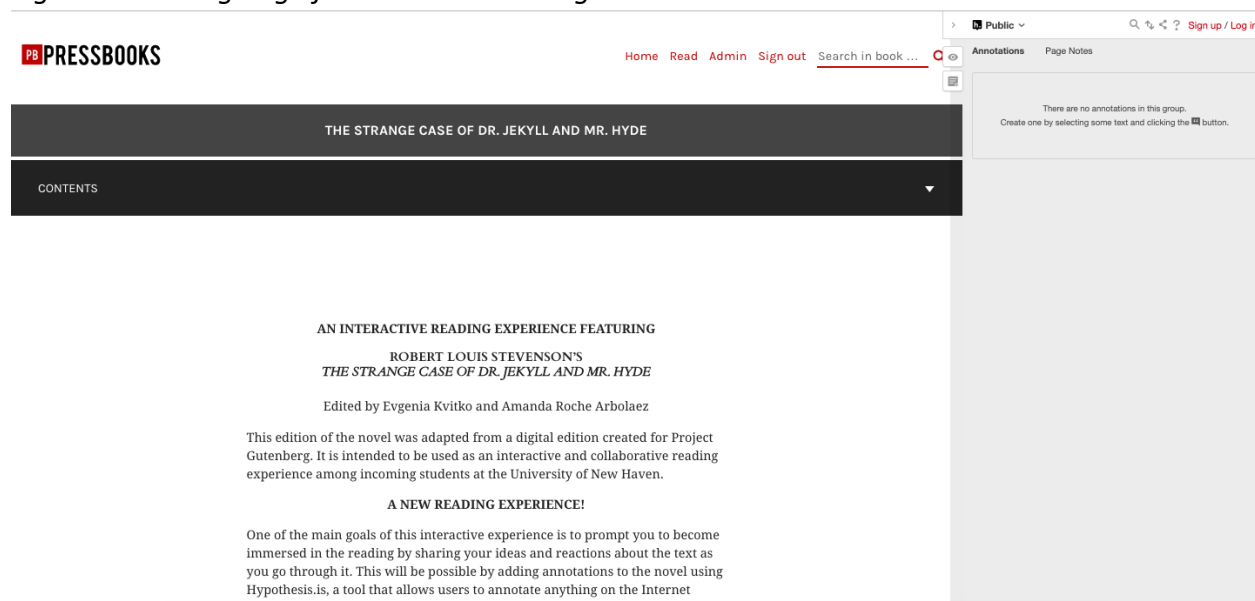
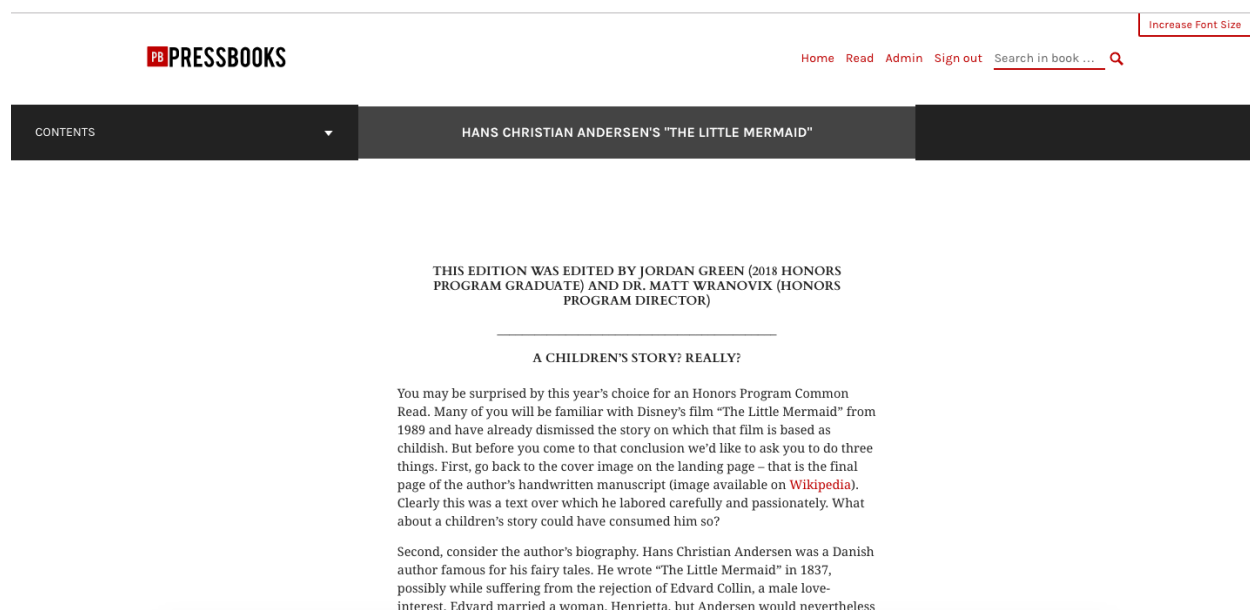
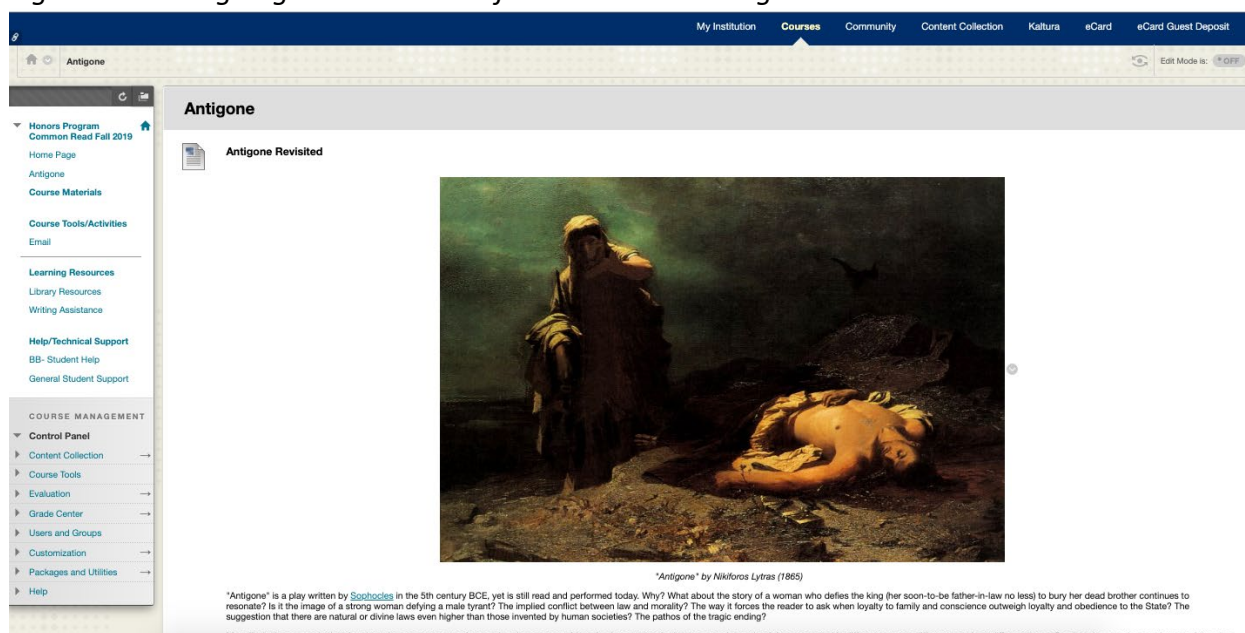


Figure 3. Landing Page for 2018 Honors Program Common Read



Each text was the subject of a guest lecture by a university faculty member at the Honors Program Orientation Dinner in August. In 2016, a poet and professor of African-American literature spoke about the continued legacy of slavery in contemporary America; in 2017, a bioethicist helped students think about recent advances in gene-editing; in 2018, a sociologist spoke about his research on gay male choirs and their role in giving gay men in Connecticut a voice and sense of identity; and, in 2019, the campus chaplain and advisor for the President's Public Service Fellowship challenged students to think about the relationship between law and morality. These lectures and the ensuing discussions helped students see the continued relevance of classic literature.

Figure 4. Landing Page in Blackboard for 2019 Honors Program Common Read



3. Results

A significant percentage of students have chosen to participate in the fully optional Honors Program Common Read Program each year. In 2016, 28 students out of a class size of 66 (42%) left a total of 563 annotations; in 2017, 42 students out of a class size of 128 (33%) left a total of 821 annotations; in 2018, 67 students (57%) out of a class size of 118 left a total of 1,082 annotations; and, in 2019, 42 out of a class size of 117 (42%) left 582 annotations.

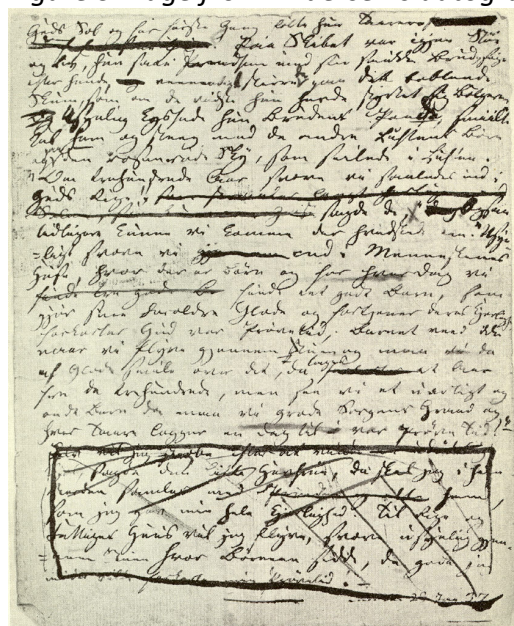
Although only a minority of students have chosen to annotate, those that have made that choice have become deeply engaged. The average number of annotations made per student participant has ranged from 14-20.

We have also discovered that the type of editorial introduction strongly affects how students interpret the text or at least affects what kinds of annotations students are willing to share. In 2016, we intentionally kept our introduction to *The Narrative of the Life of Frederick Douglass* focused on how to use Hypothesis and gave students no interpretive guidance about how to read the text or what to look for. The result was that student annotations were wide-ranging and creative. Students defined terms, explained allusions, expressed outrage, applied historical knowledge, speculated about motives, and marveled at Douglass' skill as a writer. Some compared episodes in the text to novels they had read such as *The Hunger Games* and *Beloved*; one saw stylistic echoes in Martin Luther King Jr.'s "Letter from Birmingham Jail." One student compared the function of the alcohol-fueled holidays granted to slaves in nineteenth-century America to the bread and circuses of the Roman Empire. Most, however, made more contemporary connections. One student, the daughter of parents who had immigrated from Latin America, made a powerful comparison between the routine family separations during auctions of the enslaved and modern-day deportations of immigrants; the same student also saw a parallel between the arguments used to oppose the use of free Black carpenters in the nineteenth century and those used to oppose

immigration today. Horrified by the disparate treatment of free whites and the Black enslaved in the text, some saw links to the Black Lives Matter movement and the issue of how minority communities are policed in the United States. In one long discussion about Douglass' claim that many enslaved people would defend the reputation of their masters when speaking with enslaved people from other plantations, some students applied their knowledge of Stockholm Syndrome, while others compared the phenomenon to the way students will complain about their university to fellow students but defend its reputation when speaking to outsiders.

In 2018, however, we adopted a different strategy. That year, we chose Hans Christian Andersen's fairy tale, "The Little Mermaid." Given the widespread familiarity with the Disney film based on the story, we feared that students might dismiss the text as a story for children and beneath their attention. To demonstrate to students that this was a text worth reading, we provided more guidance than we had in either 2016 or 2017. We provided students with an image of Andersen's autographed manuscript (Figure 5), a page which clearly showed how much he labored over his text.

Figure 5. Page from Andersen's autographed manuscript



Source:

https://en.wikipedia.org/wiki/The_Little_Mermaid#/media/File:Mermaid_Last_Page.jpg

Inspired by the introduction composed by the student who proposed the text, we also shared the hypothesis by some literary scholars that Andersen's tale was inspired by his unrequited love for another man; according to this interpretation, the mermaid's loss of her voice and the pain she suffers when she pretends to be human symbolizes the plight faced by gay and lesbian men and women in Andersen's society. Our introduction clearly sparked interest in the text, as 2019 saw our highest levels of engagement thus far. But there was a hidden cost to the additional guidance and that was a loss of interpretive freedom; about 39% of all annotations in 2019 referenced LGBTQ issues and/or the concept of heteronormativity. The power of our introduction was such that students strove to interpret

even fairly banal details from the story in light of this theme. For example, the very first paragraph inspired storms of commentary:

Far out in the ocean, where the water is as blue as the prettiest cornflower and as clear as crystal, it is very, very deep; so deep, indeed, that no cable could sound it, and many church steeples, piled one upon another, would not reach from the ground beneath to the surface of the water above. There dwell the Sea King and his subjects. (Andersen, p. 124)

No doubt inspired by their high school literature courses, which often (deliberately or not) promote a scramble to identify themes in symbolic imagery, students found plenty to interpret in Andersen's description of the setting. They argued that the blue but clear sea represented both Andersen's sadness and the clarity of the reasons for it; that the depth of the sea symbolized the distance between heterosexual and LGBTQ communities; and that the use of church steeples as a unit of measurement was a commentary on the opposition between Christianity and homosexuality. Andersen's second sentence inspired similar interpretations:

We must not imagine that there is nothing at the bottom of the sea but bare yellow sand. No, indeed, for on this sand grow the strangest flowers and plants, the leaves and stems of which are so pliant that the slightest agitation of the water causes them to stir as if they had life. Fishes, both large and small, glide between the branches as birds fly among the trees here upon land. (Andersen, p. 124)

Here are two typical responses to the above passage:

This paragraph is a critique of heteronormativity, as the sand could be compared to people. In a culture with enforced heteronormativity, people would assume that everyone is heterosexual because they never hear or know otherwise. Here, Andersen says that we must let go of these preconceived notions and embrace the fact that everyone is different and, thus, have different sexualities. These differences are represented by the numerous unique plants and flowers that grow in the sand and the fish that live there.

This shows the separation between homosexuals (fish) gliding in the deep dark, hiding, versus the birds, or heterosexuals, who are free to fly around the land and over the ocean as they please. Birds are often related to the idea of being free. This comparison shows how heterosexuals live free of the constant belittling homosexuals receive. Also the use of the phrase "here upon land" shows normality of the birds/heterosexuals having control over the story and how perspectives are often shown, especially now a days in media.

We can see how powerful this sort of editorial framing can be in one student's annotation, which (consciously or not), began to describe the mermaid as Andersen. Responding to the passage, 'The little mermaid, dressed in silk and gold, held up the bride's train (Andersen, p. 163),' the student wrote, 'Although he is dying of heartbreak, Andersen is still devoted to the prince- devoted enough to ironically assist the wedding ceremony that will be the death of

him.’ There were, certainly, other approaches to the text and some students did display some independence. Students wrote about gender roles and social hierarchy, noted discrepancies between the text and the Disney film, and even made links to themes raised by our university’s orientation workshops. However, it is clear that our editorial introduction created pressure to read the text a certain way, an observation we explore in greater detail below.

In the Fall 2019 semester, an honors version of our institution’s first-year writing course became required for all honors students. In this course, students reflect on the experience of social annotation and have the opportunity to create a pitch to convince the Honors Program Director to select a chosen text as a future Common Read. The benefits of this structure are manifest. Students will have to survey a range of texts and have to consider both the audience for the text itself, future students, as well as for their pitch, a faculty administrator. The projects will also give administrators insight into the kinds of texts students want to read together.

4. Discussion

Our goals for the Honors Program Common Read were to create an interactive experience that encouraged students to read carefully, to establish a space for students to learn from each other, and to help students realize that true scholarship means entering into a conversation with others. Social annotation of public domain texts using Hypothesis has helped us achieve those goals and has encouraged us to refine them.

Students are able to build and share expertise; we have had students identify and explain biblical references in *Narrative of the Life of Frederick Douglass*, while another researched and reported back on the cultural importance of cornflowers to interpret a seemingly meaningless detail in Andersen’s fairy tale. Even before students arrive on campus, they can begin to craft an identity as scholars and experts rather than passive learners. It is important to note, of course, that this activity can still prompt student engagement that seems less about expressing genuine responses and more about demonstrating an ability to find the “right” answer.

Hypothesis provides a medium for students to encounter their peers’ thoughts, while encouraging students to pay attention to particular words, phrases, and passages. We now recognize that we want to help students do this work in a way that prepares them to expand beyond the habits of learning that might have developed in prior educational settings. For example, the overzealous interpretation of “The Little Mermaid,” clearly guided by our more directive editorial introduction, deserves some reflection. Did our editorial introduction incentivize students to pursue the correct answer rather than truly engage with the story? Stanley Fish has questioned this approach to teaching literature in his seminal *Is There a Text in This Class? The Authority of Interpretive Communities*, which offers a critique all the more relevant as we invite students to engage in social annotation.

Fascinating in “The Little Mermaid” iteration of the Honors Common Read, however, is the fact that students enthusiastically carried out this task while participating in a voluntary activity that would not receive a formal grade. There are many ways to think about this behavior that will be of interest to honors administrators and faculty educators alike. First,

we might suggest that students see the Honors Common Read, though voluntary, as a high-stakes activity in which they need to prove themselves worthy of inclusion in the program; essentially, this overzealous interpretation is a symptom of the ever-present imposter syndrome common to incoming honors students. It is also possible (though, we think, less likely) that students have so internalized the interpretive techniques they were taught in literature classes that they approach all texts in this way. A more in-depth study of student annotations will provide additional insight into this issue, but for the purposes of this article, it seems useful to remember that we are often working with students who are putting tremendous effort into assuming their new role as honors students; if we want to push them to bring their own ideas and (potentially unexpected or even irreverent) responses to the discussion, we should be careful not to inadvertently ask for a performance of literature skills students think we want to see.

One of our primary motivations for building a common read for the Honors Program is that we want to encourage students to recognize that the university invites us all to participate in the life of the mind both inside and outside of formal classrooms. We want them to attend lectures and engage in discussions not because they are requirements but because they are genuinely interested in the topics being discussed. One benefit of our approach to the common read is the insight it provides into what does or does not resonate with students. While the social annotation of a text certainly sets a productive experience in motion, benefits truly emerge when the texts have been chosen by students. The annotated versions of the common read text are now being integrated into assignments in the honors version of first-year writing so that faculty instructors can help students think about what it means to read a text closely, how research questions affect interpretations, and how considerations of audience affect style. As mentioned above, these first-year students will be given an opportunity to propose future common read texts. Our initial group of texts were selected by students who had graduated by the time their recommendations were implemented, but encouraging first-year students to suggest texts makes it more likely that those students can be involved in planning the in-person common read events incorporated into orientation activities.

We suspect that housing the common read within Blackboard (as opposed to a public website built with Pressbooks) inevitably positions it as an assignment. The images above illustrate the very different look and feel created by the two platforms. The fact that the texts will also be incorporated into course assignments also sends this message. Honors administrators interested in adopting this approach to the common read will need to consider whether a public Pressbooks site or a closed Learning Management System makes the most sense for hosting the chosen text. Administrators should also note that we plan to refine our approach to account for recent research suggesting that integrating linked-open data into the social annotation experience can enhance the positive outcomes we have noted (Zarzour and Sellami, 2017, p. 386). The way the text is presented to students will also have a profound effect on how students approach it and the type of commentary they will share.

Though the frame for the activity and the methods used to invite student participation must be selected with care, social annotation of public domain texts is a low-cost method of achieving the goals of common read programs. Students are afforded an intellectual

experience both personal yet shared and are invited to help craft that same experience for their peers in the future.

References

Andersen, H. C. (1915). *Hans Andersen's Fairy Tales* (J. H. Stickney, ed.). Ginn and Company. (Original work published 1837). Retrieved from <https://www.gutenberg.org/files/32572/32572-h/32572-h.htm>

Annotation Studio. Retrieved from <https://www.annotationstudio.org/>

DeRosa, R. *The Open Anthology of Early American Literature*. Retrieved from <https://openamlit.pressbooks.com/>

Fleerackers, A., Alperin, J. P., Morales, E., & Kalir, R. (2019). *Comment, reply, repeat: Engaging students with social annotation*. Retrieved from <https://www.scholcommlab.ca/2019/08/27/social-annotation/>.

Fish, S. (1980). *Is There a Text in this Class?* Cambridge: Harvard University Press.

Howard, J. (2012). With 'social reading,' books become places to meet. *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/Social-Reading-Projects/135908/>.

Kennedy, E. H. & Boyd, A. (2018). Gendered citizenship and the individualization of environmental responsibility: evaluating a campus common reading program. *Environmental Education Research*, 24(2), 191-206.

Sprouse, M. (2018). Social Annotation and Layered Readings in Composition. In Chen Chen, Kristopher Purzycki, and Lydia Wilkes (Eds.), *Proceedings of the Annual Computers and Writing Conference* (pp. 39-52). Fort Collins, Colorado: The WAC Clearinghouse.

Sun, Y. & Fei Gao. (2017). Comparing the use of social annotation tool and a threaded discussion forum to support online discussions. *The Internet and Higher Education*, 32, 72-79.

Zarzour, H. & Sellami, M. (2017). A linked data-based collaborative annotation system for increasing learning achievements. *Educational Technology Research & Development*, 65(2), 381-397.



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Note

(Fund)raising honors: Blending conventional and technological approaches to development

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1. Introduction

The success of an academic institution is predicated upon its ability to recruit top students and to prepare these students to become productive citizens. Despite the fact that honors programs and colleges offer a value-added approach to higher education, the current funding climate leaves many of us relying on external sources of funds. Most honors administrators are not trained in development work, so it is imperative that we build networks and relationships that can assist in fundraising efforts (Carnicom & Mathis, 2009). This note will focus on development with an emphasis on (fund)raising honors at a public, four-year university in the United States.

The Van D. and Barbara B. Fishback Honors College is fairly young at nearly twenty years old. While we received an endowment that established honors as the first named college at South Dakota State University, the most frequent donations we receive are between \$1 and \$100. Our graduates are early-career professionals and often have close ties to both honors and their home academic college. While these facts may seem like obstacles, there are many opportunities to engage alumni, community members, and industry professionals in support of honors. Our capacity for development work is enhanced when we shift our emphasis from raising *funds* to raising *honors*. We accomplish this by raising the bar, raising awareness, and raising relationships.

2. Raising the bar

Honors colleges and programs provide an opportunity for institutions of all sizes and financial means to engage with students searching for more in their educational experience. In the spirit of our institution's land grant mission, our vision is an inspired honors alumni base who are equipped with the skills and ethic to achieve their greatest potential and to offer their skills in service of others. We serve our students by raising the bar to prepare them for success in a rapidly changing and complex world. We raise the bar by focusing on innovative methods for developing our students and mobilizing those priorities as integral foci in our strategic plans.

Components of a comprehensive strategic plan include mission, core values, a long-term vision, tactical plans, budget, and an infrastructure to support the strategic priorities. The Fishback Honors College engages students, staff, faculty, alumni, and donors as collaborators in our strategic planning process. This method accomplishes two important goals: 1) it sends a strong message by building the strategic plan around raising honors and planning clear methods for being accountable to the mission; and 2) all stakeholders are invested in co-creating a vision for what success should look like and how to get there. Whether a program has a current strategic plan with bold and compelling visions or is starting with a fresh slate, never underestimate the importance of developing and communicating a bold vision for providing premier honors education.

3. Raising awareness

Every honors program has incredible value to offer. The key is finding effective strategies for raising awareness by sharing a bold and compelling vision, telling impactful stories, and creating meaningful ways to engage donors. A key element of raising awareness is establishing honors as a priority within the campus and within the development program. Andrews (2009) recommends establishing relationships with key administrators as one of the first steps toward a more comprehensive honors development plan. Establishing a place for honors, as well as appropriate infrastructure and resources, is also among the National Collegiate Honors Council's characteristics of a fully-developed honors program (National Collegiate Honors Council). This awareness can be accomplished by sharing that the value of Honors is that we exist everywhere across campus. Honors enriches the academic framework and provides enriching co-curricular opportunities to develop our students as scholars, leaders, and global citizens. In the words of John Kennedy, "A high tide lifts all boats." Similarly, a robust honors program can elevate the academic experience of all students and faculty through transformative education when these experiences and expectations permeate the rest of campus.

Effective strategies for raising awareness can include significant accomplishments or national recognitions bestowed upon members of the students and faculty, but we have also found that appealing to personal connections and creating opportunities for student growth have piqued the interest of donors. Carnicom and Mathis (2009) also found that sharing students' stories was a vital tool for marketing honors. The culture present within the Fishback Honors College is one that feels like family. We offer a home away from home for students and are committed to building a strong community and creating connections to empower one

another. Additionally, we embrace failure and use it to build better outcomes. Success for our students is not necessarily winning every single time but rather growing from experiences and leveraging lessons to build a future they can thrive within. Ultimately, the Fishback Honors College is a safe and challenging space for students from all disciplines to push beyond their comfort zones so that they can stretch themselves towards achieving their greatest potential.

Finally, we exist to make high quality honors education accessible for all. Because South Dakota State University is home to the Van D. and Barbara B. Fishback Honors College, some of the best and brightest students in the world can receive a premier education in the modestly populated upper-Midwestern town of Brookings, South Dakota. In the spirit of accessibility, we do not charge additional fees for honors courses or activities. So, donor support is vital to ensuring that quality educational and extracurricular opportunities are available to all honors students.

4. Raising relationships

Raising awareness corresponds with raising relationships. Understanding alumni, donors, and prospects is essential to being relevant in their lives. Development programs need to evolve to meet the needs and expectations of those who financially support their institutions. One strategy, suggested by Johnson (2018), is reaching out to families of students, in addition to alumni and community members, to support the work of the honors program. Digital platforms have also emerged in recent years and are great examples of fund raising tools. Digital platform fund raising should be a core element of all fund raising programs. According to Josh Birkholz, Principal at Bent Whaley Flessner, (J. Birkholz, personal communication, October 5, 2018), 'Platform fundraising needs to become a profession in the modern development program. Like analytics, it needs to be purposeful, multifaceted, and cross functional.' One way we have engaged in fund raising using digital platforms is through a partnership with the South Dakota State University Foundation called *One Day for STATE*.

The first and preparatory phase of *One Day for STATE* entails identifying lead donors who will provide *challenge gifts*, or gifts that will be revealed on the actual date of the *One Day for STATE* event. The challenge gifts do not become available to the university until a target number of people have made a gift, of any amount, during the 24-hour campaign. *One Day for STATE* uses social media and digital platforms to engage students, alumni, and community members in supporting campus programs—including the Fishback Honors College—through donations that contribute toward “unlocking” the challenge gifts. Each time a targeted number of donations is met, a new challenge gift becomes available to the university. These results are updated in real-time and contribute to the level of excitement surrounding the concept of giving. Because large challenge gifts are “unlocked” by the numbers of total donations made during the 24-hour event, and not on the amount raised, every prospective donor knows that a gift of any size is meaningful and helps to make larger sources of funds available to the institution and college they love. Donations of all sizes are encouraged, with the hope that people who are giving for the first time—especially students and recent alumni—will become interested in continuing, and eventually bolstering, their support of honors.

5. Raising honors

We also build relationships in more traditional ways—engaging prospective donors in conversations about the Fishback Honors College and our students. These relationships with community partners and alumni are invaluable because alumni especially may feel a particular loyalty to an honors program they benefited from personally (Andrews, 2009). The members of our honors community are engaged as honors advocates and are regularly integrated into our programming. Prior to asking a prospective donor for a substantial gift, we have invested in the relationship and have gotten to know what they are passionate about supporting. When they ask questions about honors, we are able to provide personalized and detailed examples about the transformative impact Honors has on the lives of our students. We are able to answer honestly, while speaking directly to the donor's heart. Simply put, relationships matter. People want to know that they are valued and that they can add value.

Regardless of whether an institution is dependent on fundraising, all honors administrators have the responsibility of raising honors. The strategy of raising the bar, raising awareness, and raising relationships establishes a culture where people want to be a partner and see the value of investing (time, resources, expertise) in honors. Having a strategic plan and including stakeholders in the planning process can increase support for honors programs from external sources and from one's home university. Sharing the story of your honors program can help to recruit supporters and make honors a priority within your university. Blending traditional fundraising methods with time-sensitive crowd funding approaches embedded in trending social media platforms can maximize the opportunities for all members of our honors communities to invest in the Honors College. A similar blended approach to raising honors is equally powerful beyond the context of fundraising. These strategies can and should be adapted by any university to raise the conversation about the importance of honors education.

Acknowledgments

We appreciate the generous support of our namesakes, Van and Barb Fishback, as well as the many additional community partners who continue to invest in the honors student experience at South Dakota State University.

References

- Andrews, L. R. (2009). Fundrai\$ing for honor\$: A handbook. *NCHC Monograph Series*. 20.
- Carnicom, S., & Mathis P. M. (2009). Building an honors development board. *Honors in Practice – Online Archive*. 100.
- Johnson, M. L. (2018). Including families in the honors experience. *Honors in Practice – Online Archive*. 279.

Other resources

National Collegiate Honors Council. *Basic Characteristics of a Fully Developed Honors Program*.

(https://www.nchchonors.org/uploaded/NCHC_FILES/Program_Review/NCHC_Basic_Characteristics.pdf)

South Dakota State University Foundation (<https://www.sdstatefoundation.org/impact/one-day-for-state>)

Note

Book Review of *Robot-Proof: Higher Education in the Age of Artificial Intelligence*

Author: Joseph E. Aoun

Publisher: Cambridge (MA), MIT Press

ISBN: 9780262535977

Date: August 2018

Paperback, 216 pages

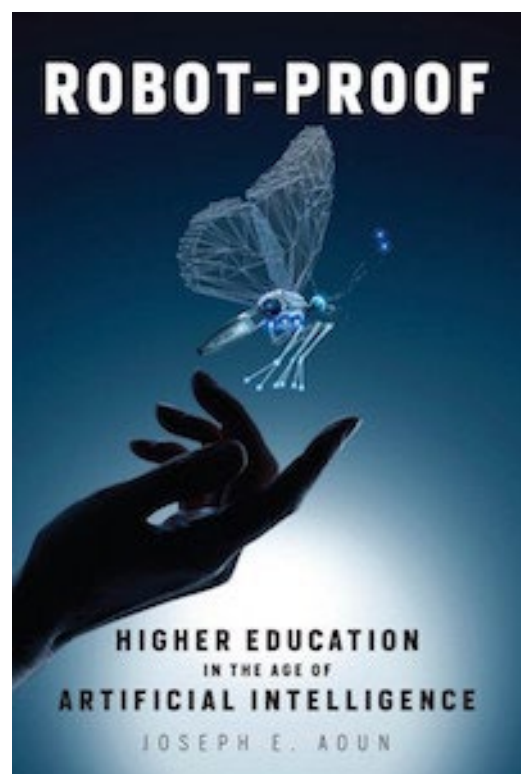
Book Review by: Albert Pilot, emeritus professor at Utrecht University, email: A.Pilot@uu.nl

Received: 11 February 2020; Accepted: 22 May 2020; Published: 9 July 2020

Keywords: higher education; honors education; artificial intelligence

1. Introduction

The recent advances in artificial intelligence and the consequent exponential increase in the capacities of computers have led to the automation of many professional jobs. In his book *Robot-Proof*, Joseph Aoun, president of Northeastern University in Boston, proposes an approach to teaching the next generation of university students that not only fulfills the needs of society but that the most advanced artificial intelligence cannot fulfill. Aoun argues that robot-proof education should focus on a creative mindset and mental flexibility. He describes the framework for a new discipline, Humanics, which builds on the strong qualities of people and prepares students for a job market in which human professionals work closely with smart machines. Higher education based on Humanics can equip students for life and allow them to adjust to the world in constant flux, alongside the robots. Aoun's book has implications for education policy in universities around the world and, given its innovative nature in education, for honors programs as well.



2. Desired competencies that employers want

The most requested new competencies by employers that Aoun reports include: the ability to work in multidisciplinary teams, good judgment, curiosity, empathy, leadership, a growth mindset, complex problem-solving, written communication, and abstract thinking skills that liberal arts education or honors programs develop rather than professional programs. The emphasis among employers has shifted from the knowledge of specific technical details of a discipline or field to holistic systems of thinking. Universities will thus play a key role in preparing their graduates for the future labor market that expects these competencies.

3. New literacies and key cognitive capacities needed

Aoun advocates three key literacies and four cognitive capacities as the core of the new robot-proof education that will enable the development of the key employer-desired competencies. He defines “Humanics” as a discipline that teaches both mastery of professional knowledge and the development of the new key literacies: technological literacy, data literacy, and human literacy. People need technological literacy to understand how machines work and how to use various tools to solve messy problems. Technological literacy requires knowledge of mathematics, coding, and basic engineering principles. Data literacy involves understanding and using “Big Data” through statistical analysis and context analysis to find meaning in a flood of information and present that meaning visually. Human literacy requires learning to interact with other people. Maintaining effective relationships is the key to a winning team; as is understanding people to help us address their problems and offer better products or services. Humanics thereby nurtures the students’ mental and intellectual qualities that are unique to humans.

In addition to the three literacies, Aoun proposes four cognitive capacities as key for the future of university graduates. These capacities include critical thinking and systems thinking, the meta-skills to analyze, understand, and manage complex problems, as well as entrepreneurship and cultural agility, the ability to perform in cross-cultural settings. While some of the cognitive competencies named by Aoun can be found as critical outcomes in honors programs around the world, the literacies encompassed by Humanics typically are not as commonly addressed within honors and might be good candidates for future inclusion in honors programming.

4. Teaching implications

Aoun offers several ideas on how we as educators may teach to allow our students to stay relevant in the robotic-age while building context-dependent educational programs. He focuses on experiential learning models that allow students to experience concepts in concrete, authentic situations and process those experiences into relevant learning outcomes. To teach the new literacies and competencies, we need to expand our didactical toolbox. For example, thematic education across the boundaries of the disciplines, project-based learning, and co-op education in which students alternate regular education in the classroom with long-term full-time immersion in professional practice and then integrate those two components are just a few examples of learning activities that can be created in the context of real-life situations.

Aoun describes the stages in his proposed learning process as follows: 1) acquiring components of the skills; 2) practicing integrating the skill in a specific context, and 3) learning to apply the skill in new contexts. The concept of transfer and the distinction between ‘near transfer’ and ‘far transfer’ is of great importance in this regard (the latter being the most difficult), where the skills are applied in a distinctively new scenario. Both theoretical and practical knowledge are needed to successfully use experiences when applying skills in new contexts. Supervision by teachers is crucial for this learning process to facilitate far transfer. Since computers are not good at far transfer yet, far transfer skills will make students more robot-proof. According to Aoun, Humanics education with experiential learning as a catalyst is the most certain path to a robot-proof future.

5. Lifelong learning (LLL)

We no longer can assume that we are done learning when we graduate college. To stay relevant, learning must be a lifelong endeavor. Universities also might want to reconsider their concepts of a “student” and “alumnus.” The existing universities are focused primarily on the standard forms of curricula for traditional students: the bachelor and master programs for students who come from secondary education and then forever leave their institutions as alumni after four to six years. Aoun argues in favor of breaking down this standard structure and re-thinking all the various aspects of the university. He proposes an educational model aimed at people who have a lot of time and little experience (the young alumni) and those who have little time and a lot of experience (the older alumni). Each group offers different opportunities to reconnect for further learning. Aoun also proposes that alumni should have a functional relationship with the universities, not just the usual social relationship, as alumni can be of great value in feeding their alma mater with new knowledge and experiences, creating new nodes of expertise for academic programs, research, educational resources, and opportunities for experiential learning.

The demand for LLL is now developing rapidly. In 2016, 40% of students in colleges and universities in the US were older than what is traditionally considered a student. For 2025, the number of students older than 25 years is estimated at 9.7 million. Institutions must now capitalize on these new opportunities, offering a wide variety of programs aimed at different groups, becoming the hub of lifelong learning for everyone.

6. Implications for universities and honors programs

Aoun’s book provides inspiring insights on how to adapt higher education to the developments in artificial intelligence with all the challenges, uncertainties, chance, and confusion surrounding it. The focus on the three literacies and four cognitive capacities give direction to the discussions regarding the future preparation of students for the changing labor market. From the perspective of lifelong learning, experiential learning, and examples of cooperation between institutions, course participants, and employers, Aoun shows what adjustments are needed in the educational policy of higher education institutions. I find the book highly relevant to European higher education, even though it is written in the US context. Honors programs can be a wonderful laboratory for the innovative education suggested by Aoun and a place for the needed professional development of future faculty.

Note

Honors in the Time of Corona

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Abstract

All of us who love what we do as teachers; who love our disciplines, scholarship, and students; who thrive on the challenges and rewards of honors education—we all have faced many new obstacles and disappointments caused by the COVID-19 pandemic. Having resources to help us deal with the shifts is key to moving forward. While many concerns have surfaced in our profession, this essay's collection of international resources focuses on four topics that affect honors in immediate ways: retooling faculty approaches to teaching; addressing student access and success; adapting capstone projects and presentations to online delivery and assessment; and adjusting grades (always a big factor in honors recruitment, retention, scholarships, alumni pathways, and more). To make the collection more useful, the list of resources includes some brief annotations to help organize and preview the items.

Keywords: COVID-19; online teaching; remote learning; pedagogy resources

1. Introduction

Any of you familiar with the novels of Colombian novelist Gabriel Garcia Márquez will probably recognize the inspiration behind my title, even if the correspondence is a bit of a stretch. His novel *Love in the Time of Cholera* rings of passion, disappointment, delayed fulfillment, and the fear and disruptions caused by pandemic disease. All of us who love what we do as teachers—who love our disciplines, scholarship, and students; who thrive on the challenges and rewards of honors education—have faced many new obstacles and disappointments caused by the COVID-19 pandemic. The prevalent fear and disruptions that have become the 'new normal' in our lives have resulted in having to delay the fulfillment that usually comes with the satisfaction of a dynamic classroom discussion, an energizing conference with a student in our office over an exciting project idea, a round of applause at a senior capstone presentation, or a wave of proud smiles at a commencement celebration.

Honors—indeed all of higher education—in the time of the Coronavirus infection has inexorably changed; having resources to help us deal with the shifts in philosophy, priorities, and practices in our pedagogy is key to moving forward.

At the time of my composition of this compilation of helpful information, practical tips, and model responses to the pandemic crisis, we are told by world health professionals, international government leaders, and popular media that the end of the situation is not immediately in sight. Many institutional administrators predict that taking our teaching and learning and other professional and scholarly duties online in order to comply with worldwide ‘social distancing’ and ‘stay-at-home’ orders will likely extend indefinitely beyond the present to future semesters. Undoubtedly, the sudden demand to ‘go remote’ has upended much of what we have always done well in honors and why and how we have done it. The need to adapt has been difficult, but it has also opened up new opportunities, new avenues for rethinking and redesigning our pedagogical approaches. For instance, perhaps now honors is ready to reconsider the notion that honors and ‘distance learning’ are antithetical propositions. Having been compelled to adapt to remote teaching, learning, and program management in order to continue to challenge, encourage, support, and reward our students (and faculty), perhaps now we can reimagine how the honors experience can be sustained and even enhanced by technology. Brave new world. Honors in the time of Corona . . . and after.

As co-chair of the National Collegiate Honors Council (NCHC) Teaching and Learning Committee (T&L) and a subscribing member of the European Honors Council (EHC), I have taken a strong, vested interest in sharing resources with honors colleagues through email, publications, and other means of communication. My enthusiasm for conversations about teaching and learning has grown from my career-long association with the Professional and Organizational Development Network in Higher Education (POD) and the international world of faculty development and teaching and learning centers. Many of the resources I cite in this essay are borrowed from the generous contributions of dedicated faculty development colleagues affiliated with such global networks. Given the rapid changes that often occur in web addresses, some of the links in the following list of resources may not work properly, but with a little creativity and tenacity, readers can still find the information.

Worldwide conversations have emerged about online issues such as how to administer and evaluate traditional tests and quizzes; how to proctor student work; how to deal with breaches of academic integrity; how to use or not use routine student evaluations of courses that have gone remote at midstream; how to continue or delay typical faculty promotion and tenure requirements and timelines—and these are just a few of the many serious concerns that have forced reconsideration of business-as-usual. However, I restrict my focus here to four topics that affect honors in immediate ways: retooling faculty approaches to teaching; addressing student access and success; adapting capstone projects and presentations to online delivery and assessment; and adjusting grades (always a big factor in honors recruitment, retention, scholarships, alumni pathways, and more) to accommodate the unexpected, sudden shifts in course design, pedagogy, and assessment. To make the collection more useful, I have added some brief annotations to help organize and preview the items.

2. Resources for Remote Teaching and Learning

- The International Association of Universities (IAU) provides a list of abundant resources that also link to worldwide higher-education responses to the challenges of teaching and learning during COVID-19: <https://www.iau-aiu.net/Covid-19-Higher-Education-challenges-and-responses>
- Utrecht University has assembled a valuable array of tips and tools on remote teaching, ranging from an assessment framework to handling lectures, digital laboratories, testing, proctoring, and more: <https://www.uu.nl/en/education/quality-and-innovation/remote-teaching>
- Daniel Stanford of DePaul University has compiled an evolving comprehensive list of almost 450 institutional responses from different countries to the urgent call for continuity of teaching and other business: <http://bit.ly/rtresourcelist>
- The University of Iowa's faculty development resources include a site full of valuable, practical tips for faculty moving their courses to the online environment: <https://teach.uiowa.edu/keep-teaching-iowa>
- Iowa's resources also include useful video lessons in their Extraordinary Teaching Project:
 - How to give brief, effective feedback to written or performative work through short video clips: <https://teach.its.uiowa.edu/grading-recorded-clips>
 - How to facilitate group work in distance classes: <https://teach.its.uiowa.edu/extraordinary-teaching-project-engaging-students-online>
- An excellent collection of practical, quick-to-implement approaches to a number of issues that faculty encounter when moving instruction online has been created by U.S. Professor of the Year Steven Volk of the Great Lakes Colleges Association/Global Liberal Arts Alliance: <http://glcateachlearn.org/going-online-fast-resources-to-help-you-move-your-instruction-online/>
- UNESCO's Global Education Coalition provides many resources for responding to the pandemic's effect on educational institutions and on teaching and learning from primary schools to colleges and universities: <https://www.insidehighered.com/digital-learning/article/2020/05/13/one-option-delivering-instruction-if-campuses-open-fall-hyflex>
- Daniel Stanford of DePaul University has created an IDDBlog post, 'Videoconferencing Alternatives: How Low-Bandwidth Teaching Will Save Us All.' Both faculty and students will likely continue to face challenges of redesigning courses and ensuring equitable access. The bottom-line lesson in this piece and in others is *keep it simple!* Low-tech, familiar, simple strategies often work best, especially when both faculty and students are struggling with disrupted patterns of teaching and learning: <https://www.iddblog.org/videoconferencing-alternatives-how-low-bandwidth-teaching-will-save-us-all/>
- Erasmus University Rotterdam offers many useful resources on topics such as creating videos, assessment and grading, communication with students, and more: <https://www.eur.nl/en/about-eur/vision/community-learning-and-innovation/advice-online-education>

- Here is a useful link from Roanoke College, a strong liberal-arts college, dealing, like all of us, with challenges of going online. The site offers an honest, sensible set of guidelines and tips: <https://www.roanoke.edu/teaching/continuity>
- The European University Association has links to several resources: <https://eua.eu/news/494:resources-for-digital-learning-and-teaching-during-the-coronavirus-pandemic.html>
- Annette Schwabe of Florida State University's honors program shares in an email a colleague's website on teaching remotely, with the mantra 'People first. Content second. Technology third': <https://vanessadennen.com/teaching-online-during-covid-19/>
- NCHC Executive Director, Mary Beth Rathe, contributed these sites to the NCHC Forum (13 Mar. 2020):
 - The Instructional Design-Emergency Response Network: <https://sites.google.com/view/idernetwork/home>
 - 'Moving Online Now' - a free resource from *The Chronicle of Higher Education*: https://connect.chronicle.com/CS-WC-2020-CoronavirusFreeReport_LP-SocialTraffic.html
- The NCHC Online Toolkit: <https://nchc.site-ym.com/page/onlinehonorscourses>. This toolkit provides links to an online video presented by Victoria Bryan of Cleveland State Community College. The video is also available at <https://www.youtube.com/watch?v=GxnL-XasW6A>
- One particularly challenging dimension of online instruction is the issue of how to handle clinicals and labs:
 - Here is a gold mine of numerous resources in the various STEM fields for migrating labs to online simulations and virtual labs: <https://docs.google.com/spreadsheets/d/18iVSleOqKij58xcR8dYJS5rYvzZ4X1UGLWhl3brRzCM/edit?usp=sharing>
 - Geoscience resources for teaching online are available at <https://docs.google.com/spreadsheets/d/1-R6THvClcAjGrWRspCN915SlzItdZ95ziwiF8BmQrYc/edit#gid=0>
 - Ecology and environmental sciences resources for teaching online are described at https://docs.google.com/spreadsheets/d/16K6bGTf-wGjxxi6aGi_v6vILQSpSog1zq3tXLHWweg/edit#gid=0
 - Harvard's LabXchange shares lab simulations with assessments in biotechnology: <https://www.labxchange.org/library/clusters/abe>
 - MERLOT offers a collection of virtual labs in a variety of science disciplines: <https://www.merlot.org/merlot/materials.htm?keywords=virtual+labs&sort.property=relevance>
 - PHET offers interactive simulations in science and math: <https://phet.colorado.edu/>
 - Many textbooks provide interactive lab-based resources
- Dublin Technological University offers useful tips on online teaching and learning, alternative methods of assessment, and FAQs: <https://www.dit.ie/aadlt/ltrc/keepsteaching/>
- The Association of College and University Educators (ACUE) has a toolkit for teaching online: <https://acue.org/online-teaching-toolkit/>. Featuring valuable insights from, among others, U.S. Professor of the Year Mike Wesch, known for his innovative use

of technology in teaching and learning, the toolkit is organized into the following topics:

1. Welcome students to the online environment
 2. Manage your online presence
 3. Organize your online course
 4. Plan and facilitating quality discussions
 5. Record effective micro-lectures
 6. Engage students in readings and micro-lectures
- ACUE also has information and tips on responding to COVID-19, with additional links to other valuable sites: <https://acue.org/coronavirus/>
 - Maastricht University's online education site includes abundant strategies and answers to many questions and about remote teaching and learning: <https://www.maastrichtuniversity.nl/education/online-education-um/teaching-staff>
 - The Online Learning Consortium offers resources on 'Continuity Planning and Emergency Preparedness' helpful for instructors needing suddenly to go online: <https://onlinelearningconsortium.org/about/continuity-planning-emergency-preparedness-resources/>
 - Vilnius University's Centre for Teaching Competencies Development offers a variety of resources on moving to online teaching and learning: <https://www.vu.lt/en/covid-19/teaching-online>
 - LX Pathways by iDesign is allowing temporary free access to its tools for online course design and pedagogical strategies rooted in 'empathy, compassion, and the human experience': <https://lxpathways.com/>
 - *The Scholarly Teacher* blog site has several posts on teaching challenges and solutions prompted by the COVID-19 pandemic: <https://www.scholarlyteacher.com/blog/>
 - Magna Publications offers a coupon for free access to its 'Taking Your Teaching Online Program Collection': <https://www.magnapubs.com/product/online-courses/taking-your-teaching-online-program-collection/>
 - The Autonomous University of Barcelona features an array of resources, links, and tips: <https://www.uab.cat/web/about-the-uab/itineraries/coronavirus/coronavirus-1345809701134.html>
 - One of my favorite, no-nonsense pieces is available at <https://anygoodthing.com/2020/03/12/please-do-a-bad-job-of-putting-your-courses-online/>
 - Some gentle advice, humor, and musical relief can be found at:
 - <http://neatoday.org/2020/03/25/teaching-online-during-coronavirus/>
 - <https://www.facultyfocus.com/articles/philosophy-of-teaching/leading-our-classes-through-times-of-crisis-with-engagement-and-peace/>
 - <https://www.chronicle.com/article/How-to-Recover-the-Joy-of/248314>
 - <https://www.youtube.com/watch?v=8U6zU4MXmnA&feature=youtu.be&app=desktop>
 - <https://www.youtube.com/watch?v=CCe5PaeAeew> (in which Michael Bruening of Missouri University of Science and Technology strums his anthem to surviving remote teaching)

3. Student Access and Support Issues

Initially, the disruptions caused by the COVID-19 pandemic sent faculty into dizzying tailspins in trying to respond to the mandates to go online. Many faculty members, unfamiliar with and inexperienced in online teaching, have suddenly needed concentrated primers on using an array of technologies and redesigning courses for a different medium. Significant attention in the explosive new literature about online education in a time of crisis has been given to the challenges facing faculty, but as we move increasingly to remote methods of teaching and learning, ensuring that our students have adequate access and skills is also of paramount importance. We presume that all our students are tech savvy and have equal and immediate access to the technology and support they need to succeed in the 'new normal' world of remote education. If we took the time to poll our students about access to necessary devices, sufficient bandwidth, study areas, and other required resources, we would surely discover that access is a major concern. The topic is worth serious attention.

- Delft University provides many sensible and innovative tips and activities aimed at keeping students healthy, safe, and successful during COVID disruptions: <https://www.tudelft.nl/en/student/well-being-and-study/>
- Many of our students have no experience with or desire to adjust to online learning. They need help. The University of Iowa's Office of Teaching, Learning & Technology provides an excellent, comprehensive guide to help students adapt to the various challenges of remote learning: <https://teach.uiowa.edu/keep-learning-iowa>
- Rice University's Center for Teaching Excellence offers a detailed, useful set of tips for ensuring student success and addressing concerns about students who may not thrive under the mandates to take courses online. Colleagues worldwide are having the same conversation, trying to pay attention to issues of equity, inclusion, learning preferences, access, and other problems. Rice's site is a step forward: <https://cte.rice.edu/blogarchive/2020/3/13/inclusion-equity-and-access-while-teaching-remotely>
- The University of Melbourne offers various tips and resources to support students: <https://students.unimelb.edu.au/student-support/coronavirus>
- The University of Michigan's support site for students offers clear strategies to help students adjust their study habits for successful online learning: <https://lsa.umich.edu/content/dam/rll-assets/rll-docs/Study%20Habits.pdf>
- In addition to a number of helpful tips for students, the University of North Carolina-Asheville has developed a list similar to Michigan's in printable PDF format. Check the link to 'Student Guide: Adjusting to Online Learning' at <https://coronavirus.unca.edu/resources/remote-learning-working/>
- Among a number of other suggestions for student success during isolation, Amsterdam University of Applied Sciences offers valuable insights on student well-being: <https://www.amsterdamuas.com/remotelarning/well-being/your-well-being.html>
- The Student Academic Center at Indiana University-Bloomington has assembled student-friendly advice that includes many links to additional resources: https://sac.indiana.edu/suddenly_online/index.html

- The Experimental Psychology department at Oxford University shares a number of links related to mental health which can help with student support: <https://www.psy.ox.ac.uk/covid-19-info/covid-19-resources>
- A number of service providers have responded to the massive, emergency shift to online educational methods by offering different levels of free internet access. At the time of this writing in spring 2020, the following announcements demonstrate the actions taken by businesses and non-profits to offer help:
 - Some international communications agencies have issued temporary regulations to ease the burden on users during COVID. In the United States, for example, an FCC agreement states that providers will waive late fees, not cut off service for lack of payment, and open hot-spots: <https://docs.fcc.gov/public/attachments/DOC-363033A1.pdf>
 - Comcast COVID-19 response offers free Wi-Fi for two months to low-income families, and all Xfinity hot-spots are free to the public during this time: <https://corporate.comcast.com/covid-19>
 - Charter/Spectrum offers free internet for two months: <https://corporate.charter.com/newsroom/charter-to-offer-free-access-to-spectrum-broadband-and-wifi-for-60-days-for-new-K12-and-college-student-households-and-more>
 - AT&T COVID-19 response offers open hotspots, unlimited data to existing customers, and discounted plans to low-income families: <https://about.att.com/pages/COVID-19.html>
 - Verizon COVID-19 response is in line with the FCC agreement and offers enhanced high-speed data and no data caps: <https://www.verizon.com/featured/covid-19-waived-fees-and-charges/>
 - T-Mobile/Sprint COVID-19 response is consistent with the FCC agreement and includes a few additional offers of unlimited data and some limited free access: <https://www.t-mobile.com/news/t-mobile-update-on-covid-19-response>
- Immigrants in a number of countries face additional issues when they are marginalized from mainstream society, with less or no access to vital resources. In the United States, for instance, where so-called 'Dreamers' (DACA) confront daily issues of prejudice and disenfranchisement, the California Immigrant Youth Justice Alliance has a valuable site to help DACA students in the midst of the pandemic. It might be useful for DACA students in American honors programs and colleges but also for immigrant students in other countries: <https://civja.org/covid19/>
- Students need special support during a crisis. Here is a list of strategies to help students succeed in times of uncertainty: <https://www.insidehighered.com/advice/2020/03/17/10-strategies-support-students-and-help-them-learn-during-coronavirus-crisis>
- Another list of quick tips on reducing student anxiety, with an embedded white paper on the subject, can be found at <https://www.insidehighered.com/blogs/university-venus/student-agency-uncertain-times>

4. Strategies for Honors Capstone Theses and Projects in Remote Environment

There has been quite a conversation circulating internationally about how to deal with senior projects, thesis presentations, doctoral defenses, and such. Except for where

particular in-house technologies are mentioned as alternatives to face-to-face gatherings, most of the solutions point to using systems such as Zoom, Skype, GotoMeeting, Microsoft Teams, or similar platforms. Most honors programs and colleges include a requirement for completion of a capstone thesis or project, making the problems of delivery and assessment acutely relevant. The challenges are widespread:

- <https://cornellsun.com/2020/03/25/covid-19-complicates-some-research-plans-opens-other-new-doors/>
- <https://dailyutahchronicle.com/2020/03/23/covid-19-student-research/>
- <https://www.dukechronicle.com/article/2020/03/duke-university-closing-down-covid19-senior-thesis-work>
- The Arizona State University honors college site has some information on senior thesis completion and defense: <https://barretthonors.asu.edu/about/covidinfosite>
- The University of Washington has a detailed, comprehensive page on the effects of the pandemic on research work by faculty, graduate students, and undergraduates: <https://www.washington.edu/research/announcements/mitigating-impacts-to-research-activities-due-to-covid-19/>
- The University of Florida has a FAQ page that offers Zoom as an alternative to a face-to-face meeting for thesis defense: <http://www.ufl.edu/health-updates/frequently-asked-questions/#students>
- While the focus is on doctoral dissertations disrupted by the pandemic, the resources shared by Leiden University on new protocols for completing theses and projects can be adapted and applied to undergraduate honors work: <https://www.staff.universiteitleiden.nl/vr/remote-research?cf=service-units&cd=administration-and-central-services>
- Despite and during disruptions, we can still celebrate our students' projects by recognizing them even if only by mention on our web sites. Here is an example, responding to the pandemic disruption: <https://honors.tcu.edu/honors-week/senior-presentations/>
- Honors director Annette Schwabe of Florida State University posted this strategy in the NCHC Forum: 'We will 1. allow/request remote thesis defenses (following from grad school policy); 2. allow any seniors planning to graduate this spring or summer to complete and defend their theses after graduation, up through the end of fall 2020. We created a virtual form that committee members can sign to confirm that they agree to the extension and sent out messages to students in this group, their thesis directors, and departmental honors liaisons. We will send a list of students who complete their theses after graduation to the Registrar's office, who will add transcript notification to this effect. We have 146 students in this category and even if only a few opt for this, it will be worth it in my mind. It also sends the general message that we want to support our students and hold them harmless from circumstances well beyond their control (and acknowledge that they might or might not have the resources to navigate these uncharted waters as quickly as others)' (7 Mar. 2020).
- In an email, honors director Tom Spencer of Texas A&M University Kingsville to T&L Committee wrote: 'We're having students present their research in small groups via Blackboard Collaborate' (31 Mar. 2020).

- In an email to the T&L Committee, honors director Susan Dinan wrote: 'At Adelphi University we have about 60 students working on honors theses. Each student gave a progress report presentation in February in which they met with their advisors, readers, and the honors staff to present their thesis work up to that point. Most of the students have completed their research and are writing their theses now. They are being urged to speak with their advisors regularly. The honors staff is reaching out to encourage the students and remind them to stay engaged with their advisors. Their defenses will take place over Zoom in later April and early May. In the past, the students submitted a bound thesis to the honors college office, but this year we will request .pdf files sent electronically. We will create an online archive of theses instead of a physical collection. Perhaps this will prove to be a better way to store theses going forward and perhaps it will be easier for students to access them' (31 Mar. 2020).
- In an NCHC Forum post, honors director Matthew Wranovix of the University of New Haven wrote: 'We've decided to have students record presentations in Zoom (using PowerPoint/Prezi/Poster PDF) with screen share, archiving them in a shared Office 365 folder and then posting them to a page in Microsoft Teams. That will allow honors students and faculty to view the presentations and leave questions/comments for the presenters. We're asking the presenters to monitor the comments on their presentations and respond. . . . Eventually I'd like to build a webpage to host the presentations, but that will take time. Allowing comments is also 'safer' in a Teams environment rather than out in the wild' (23 Mar. 2020).
- In a post to the NCHC Forum, honors director Marjorie Jolles of Roosevelt University wrote: 'We have asked thesis mentors to be in more frequent touch with students via Zoom, to implement more frequent deadlines for drafts, and whatever else will give students more support and greater sense of mentor presence. For the thesis defense, we've created an asynchronous substitute for the oral presentation, asking thesis writers to create a slideshow that highlights their research question, methodology, argument, and conclusions. Mentors will then send students a couple questions to respond to' (23 Mar. 2020).
- While this NCHC Forum post by honors director Peter Bradley of Ferris State University concerns how the Mid-East Honors Association adapted to an online format, it mentions the use of WordPress as a platform for displaying student projects: 'At MEHA, we moved the entire conference online - you can take a look at <https://mideasthonors.org/conference2020/>. We retooled our existing submission system, which was based on the blogging platform WordPress, to support a virtual asynchronous conference. Students have created short videos for both posters and presentations, and we're using the blog's standard 'comments' functionality for discussion. You will need to register for the site and be logged in before you can see the videos and participate in discussions' (2 Apr. 2020).

5. Rethinking Grading Strategies

Many educators across the globe have discussed shifts to pass/fail grading or some other response to the seismic disruptions to familiar teaching and learning strategies. The issue is critical in honors because grades are often, if not always, at the center of honors recruitment, retention, scholarship selection, awards, grants, and preparation for students'

success after graduation. In this collection of some of the buzz, you will notice arguments on both sides and some ideas about compromise solutions.

- A blog post with a substantial list of different school policies: <https://oudigitools.blogspot.com/2020/03/feedback-alternate-grading-in-crisis.html?m=1>
- Another expansive list: <https://docs.google.com/spreadsheets/d/1yiguffoKBXHDt42eP3pWJkwKGxINC1nOkZMBRudENf8/edit#gid=0>
- An *Inside Higher Ed* piece with internal links: <https://www.insidehighered.com/news/2020/03/19/colleges-go-passfail-address-coronavirus>
- A *Chronicle* piece: <https://www.chronicle.com/article/Make-All-Courses-Pass-Fail-Now/248281>
- A Citadel university colleague on the web site of the Association for Supervision and Curriculum Development (ASCD): <http://www.ascd.org/ascd-express/vol14/num31/grading-for-mastery-not-mystery.aspx>
- An example of a comprehensive, up-to-date school site with vital information, including a response to a question about grades: <http://www.ufl.edu/health-updates/frequently-asked-questions/#students>
- Another example of FAQs related to a revised S/U grading policy from the Teaching and Learning Center at McGill University in Quebec:
 - <https://www.mcgill.ca/coronavirus/faqs#Satisfactory/Unsatisfactory%20option>
 - <https://mcgill.ca/tls/instructors/class-disruption/teaching-continuity-guide>
- A video from Florida International University, in which Senior Vice President Elizabeth Bejar discusses the complexities of changing grading policies (starts around 7:50 in video): <https://www.facebook.com/floridainternational/videos/146324973364458/?vh=e&d=n>
- A sample letter to students about revised grading policies at the University of Puget Sound: <https://www.pugetsound.edu/files/resources/student-message-cr-nc-grade-option-withdrawal-poli.pdf>
- Many faculty members have developed an interest in ‘specifications grading,’ an idea explained in detail in Linda Nilson’s *Specifications Grading: Restoring Rigor, Motivating Students, and Saving Faculty Time* (Stylus, 2014). Importantly, Nilson, a stickler for evidence-based practices, indicates that research on grading suggests that ‘pass/fail courses reduce student motivation to learn and excel, while pass/fail grading of assignments and tests increases it, assuming students understand the specs they need to meet for the assignment or test to merit a pass’ (POD Discussion Group post, 21 Mar. 2020).

6. Honors in the Time *After* Corona

In Márquez’s novel, Florentino and Fermina—the dispirited, star-crossed lovers who have chosen ‘social distancing’ over scandal and humiliation—end up sailing up and down the Magdalena River ‘forever,’ self-exiled or ‘quarantined’ by invention to journey under the

yellow flag of the cholera pandemic. My use of the novel in relation to our predicaments with Corona is, admittedly, quirky and forced, but let's hope that our fates today are more promising.

COVID-19 has prompted pervasive changes to honors and all of higher education. For many faculty and students around the world, the imposed shifts have diminished the intimate bond between teaching and learning. For others, the 'new normal' has created unexpected opportunities to reflect, experiment, take risks, reprioritize, find different avenues for communication, build intentional communities, accept provocative challenges, and redesign pedagogies—qualities, after all, that we celebrate in honors and in all good teaching and learning.

In a recent communication to members of the European Association for International Education (EAIE, <https://www.eaie.org/blog/community-message-sabine-pendl.html>), President Sabine Pendl reflects:

'This experience will . . . leave a lasting imprint on every aspect of our lives. We can use this as an opportunity to reflect on our practices and marvel at how radically they had to adapt to this new normal. We can look at this positively and ask ourselves, what have we learned in the process? Maintaining a more digital office space could be one of the developments. Online meetings could become even more mainstream in our sector, reducing greenhouse gases from international travel and positively impacting our work-life balance. I hope that we can continue to adapt to new ways of working, be more open to brave ideas and be more resilient when facing challenges.'

Likewise, in her opinion piece in *The Chronicle of Higher Education* (24 Mar. 2020), Flower Darby ponders how to 'recover the joy of teaching' in the wake of the disruptions that burden our work and relationships today (see <https://www.chronicle.com/article/How-to-Recover-the-Joy-of/248314>). Will that day pass? Can we restore the love we share for our students, colleagues, programs, colleges?

In another *Chronicle* article, the author asks, 'How Will the Pandemic Change Higher Education?' (10 Apr. 2020). A group of professors, administrators, staff, and others respond with a variety of prophecies that, despite the array of predictions from the apocalyptic to the bureaucratic to the sardonically amusing, have one vision in common: COVID-19 has inalterably changed why, what, when, and how faculty teach and students learn (see <https://www.chronicle.com/article/How-Will-the-Pandemic-Change/248474>). The concerned, sincere replies suggest another theme—that teaching and learning, regardless of the mode or setting of engagement, *matters*. Pandemics, natural disasters, and other dire emergencies will inevitably upset our work, our calling, but they will not erase its value. The joy of what happens in honors along with all our educational efforts that Darby references will prevail in the time of Corona and after.

If the expert epidemiologists are correct, the effects of COVID-19 on our personal and professional lives will linger long after the virus is mitigated by new social behaviors or vaccines, so we need resources that have immediate application but that also can be revisited as we continue to confront new challenges that emerge in future semesters and beyond. My hope in gathering the information, tips, and models that I share in this piece is that honors faculty and students around the world will benefit from useful material that will

help all of us thrive in our teaching, learning, and programming while we try to stay healthy and safe in the time of Corona.

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An earlier version of this note was posted as an unpublished white paper to the NCHC web site and used for an online forum discussion with NCHC members.



Note

Creating community during the COVID-19 pandemic: Honors makes a case online

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1. Introduction

The coronavirus created a new reality: a digital revolution has transformed education at universities around the world within a couple of weeks. In most European countries, the governments obliged universities to cancel face-to-face education because of the high health risks involved. This shift was needed because of the risk of infection with COVID-19.

Arguments that were given to cancel face-to-face education were the age of the students, the international body of students and a large amount of traffic involved. Before the COVID-19 pandemic, most honors educators would agree that honors education thrives on face-to-face encounters. Creating a committed community is one of the main pillars of honors teaching (Wolfensberger, 2012). In this article, we describe how the honors program of the Human Geography and Spatial Planning department of Utrecht University, a research university in the Netherlands, has adapted to the current pandemic to meet the needs of the honors students. The aim of this article is to explain how the digitalization of education, due to the coronavirus, has led to an adapted honors course with a focus on wellbeing and creating community.

2. COVID-19: measures and its effects

On February 27th, 2020, the first official infection with COVID-19 was found in the Netherlands. What followed was a rapid spread of the virus, which resulted in the first measures taken on the 11th of March. In the Netherlands, all universities firstly had to cancel their face-to-face courses with a larger audience than 100 people, then 30, and then all

courses within a few weeks. At the time of writing, large gatherings—common at universities—are still forbidden.

At Utrecht University, teachers and other staff organized themselves and made sure most of the face-to-face courses offered at the university were offered via digital platforms. The whole academic community had to change overnight into an “online community.” With over 30,000 students (Utrecht University, n.d.), this meant a lot of work. As Utrecht University already has TAUU (a community for teachers, <https://tauu.uu.nl/>) most faculty members got support on how to organize themselves. Also, a lot of information on remote teaching has been collected and offered online (see <https://www.uu.nl/en/education/quality-and-innovation/remote-teaching>).

The board of the university informed teachers and students on the progress of measures on a weekly basis. After a few weeks, task forces were also implemented as it was assumed that the teaching in the 2020-2021 academic year will still be (partly) online.

The workload for the teachers is high. It is not easy to learn new digital skills while “surviving” one’s teaching task. This digital revolution overnight asks a lot of the people involved. People have to make choices. For instance, teachers gave priority to organizing content remotely or creating new exams instead of interactive teaching or deep learning. How to create community or to stimulate professional and personal development was not a first priority.

As many considered the transformation delivered by the staff a great piece of work, the hashtag #UUGotThis went viral throughout the university. However, one of the biggest concerns was the quality of education. Some critics suggest that students graduating during the COVID-19 pandemic will receive a so-called “corona diploma”: a diploma of less quality due to the sudden switch to online education. Additionally, students fear that they cannot graduate this academic year due to several reasons, such as courses being cancelled but also internships that cannot be completed. This concern is why most of the attention is given to students who are in dire need. Honors students are able and willing to do more than the regular program can offer. As such, they are often not seen as students at risk.

A lot of students could follow all courses as they planned and could do their exams. However, soft skills courses, lab work, fieldwork and internships were difficult to replace. A lot of the teaching under coronavirus is concentrating on the knowledge and the content.

3. Consequences for students at Utrecht University

In the Netherlands, students are being confronted by loneliness due to the measures taken by the national government. As of mid-March, people who reside in the Netherlands are not allowed to come together in groups of or bigger than three people. Furthermore, people have to keep 1.5 meter distance from others who are not members of the same household. Researchers say that young adults are experiencing the biggest change in social activities, which is perhaps the reason why 49% of the young adults aged between 18 and 25 experience loneliness (Van ‘t Veld, 2020).

Additionally, in the Netherlands, it is common that students rent a student room. Those rooms are spread across the city. As there is not a real habit of campus life, loneliness is expected to be one of the effects of the corona measurements. Students told us that they are especially missing the 5 or 10 minutes before lectures.

Social cohesion is of utmost importance, especially during times of social distancing. Social cohesion stimulates the learning process and has a positive impact on wellbeing. However, facilitating social cohesion through the internet might be a challenge. By making sure to strive for social cohesion, one can work towards online bonding, an online facilitation where people come together to talk with each other and share stories.

4. Consequences for honors education and reasons for change

The honors program of the department of Human Geography and Spatial Planning (part of the Faculty of Geosciences at Utrecht University) has an interdisciplinary honors community with disciplinary components. The Geosciences Honours College brings together around 100 students from different departments in honors seminars to discuss interdisciplinary topics. Within a department, such as Human Geography and Spatial Planning, disciplinary topics are covered. This coverage is done individually or in small groups. The full honors program consists of 45 ECTS-credits (in the European Credit Transfer and accumulation System one credit equals a workload of around 28 hours) of which 15 ECTS-credits are in addition to regular education. The community, soft skills, personal development, and interdisciplinary courses are on top of the regular program. Also, the obligatory international honors trip is in addition to the regular 180 ECTS-credits bachelor program. Those “extra” elements appear to be at risk during the pandemic, as most of the teachers currently lack time to organize honors education as they are already busy with the organization of the regular education. Maybe even honors education as such is at risk as obligatory courses and majors get priority. And yet, the honors students need their honors program and the honors community that may come with it.

The honors program of Human Geography and Spatial Planning students at the Geosciences Honours College also had to adapt to the new situation created by the ongoing pandemic. Due to the COVID-19 measures, the regular honors education had to be halted. This change means that, at the interdisciplinary level, no seminars for all students were organized. It seemed impossible to maintain or create the community. The authors wanted to change this.

Many students dealt with what is being called a cognitive overload: an information overload which causes information anxiety (Kirsh, 2000). This cognitive overload made it hard for students to focus on their studies. In addition, the online education was mainly focused on self-regulated learning; most of the time, students had to plan when they were going to watch the recorded lectures. Students therefore needed to be self-disciplined, which can be hard when you have to stay at home all day. By not having to attend obligatory lectures and not seeing students and teachers in real-life, education felt less personal. Consequently, some students felt less motivated. This effect was the reason for setting up meetings focused on the wellbeing of the students as well as on movies and books.

Honors education is often focused on challenging students and making sure they get the best out of their studies. Honors students can be characterized as motivated and hard-working students. However, during a pandemic with huge consequences, it may not be desirable or appropriate to ask students to challenge themselves even more; it is observed that most of the students have to deal with more stress than they normally have to. At the

same time, distraction can help the students to relax a little bit and focus on other things besides the pandemic.

So, therefore, the authors came up with the plan to ask the students of Human Geography and Spatial Planning if they would like to continue disciplinary meetings. This continuation means online meetings with all cohorts, freshmen as well as seniors, together forming a smaller group of around 30 students, all situated in the Netherlands and speaking Dutch. The authors were especially worried about the freshmen in the honors program, as they entered the program in February 2020—just before the change to remote teaching. Therefore, the authors wanted to gather the students of all the different years. The honors students were enthusiastic about the proposal.

5. The move towards online optional meetings focused on co-creation

The authors were looking for ways to maintain or create community and social bonding while teaching remotely without any face-to-face contact. They wanted to create shared experiences. Therefore, the authors came up with the idea to create the opportunity for the honors students to design a series of optional online meetings, with emphasis on community building and with content offered through talking about movies and books. Together with the students, the authors decided to organize the online honors education by co-creation. Co-creating can empower students and make them feel more engaged (Bovill, 2013).

The authors decided to create an online meeting every two or three weeks for all honors students of Human Geography and Spatial Planning—all cohorts together. They came up with the idea to have meetings with a combination of building knowledge and sharing, with an emphasis on the wellbeing of the students. The meetings were optional and had, in principle, nothing to do with the normal content of the honors program. A meeting would take 1.5 hours. During the meetings, one teacher (one of the authors) was always present.

Looking back, thanks to the students' engagement, meetings were held almost weekly. Students were well prepared. The topics were decided by the group. Every meeting was organized and prepared in co-creation by one or two students together with the authors. In total, seven meetings with honors students in Human Geography and Spatial Planning were organized and two meetings were held for all honors students of the Geosciences honors program. Students expressed the motivational and collaborative meetings were a pleasure to attend.

With a group of approximately 30 honors students, topics such as studying at home, being ill, knowing someone who is ill, and many other topics related to the coronavirus were discussed. Students also shared how to feel good, for instance, by growing vegetables, sports, walking, or talking with friends. Through online meetings on Microsoft Teams, the students discussed which movie, TV series and/or book they would like to discuss during the next online meeting. Besides content and duration, also availability and price were taken into consideration. Conversations continued afterwards via WhatsApp. Students came up with unpredictable and thought-provoking ideas.

Students prepared a discussion which they led during the online meeting. These discussions would be based around themes which in the movie, TV series, or book students watched or read before the online meeting. This organization worked out well, as the students indicated themselves. For instance, two students prepared a discussion through Mentimeter, an online

platform which enables interaction by real-time voting. The students prepared questions about the two documentaries the whole group of students agreed to watch before the meeting. This way, there was an online, deep discussion between the students. Students expressed that they really liked the meeting and that they got new insights by talking about the documentaries. Also, they shared that discussing different point of views about the same movie was an eye-opener.

After each session, students discussed new topics and new dates. Additionally, students were also able to think of a creative way to make quick rounds checking in with people. Students indicated that they preferred to individually watch a documentary or a movie and have group meetings to talk about those visuals instead of individually reading a novel or non-fiction. Those conversations about the choice for a documentary, movie, or book were revealing. Students shared that they had to read a lot already for their studies. They preferred to have free choice what to read for leisure. They shared what kind of books they read or not and why. The group decided that the book club meetings were organized as a "hop on, hop off seminar" – making it more optional. To be clear, all meetings were optional. During the movie seminars, around 20 to 25 students joined; during the book seminars, 5 to 10 students would participate.

For the first book meeting, the group picked *Humankind: A New History of Human Nature*, written by Rutger Bregman. When the group talked about this book, the effects on themselves and others of the measurements because of the COVID-19 pandemic were also discussed. Students also connected the content of the book with actual ethical issues. The recent murder of George Floyd, who died after a police officer knelt on his neck for nine minutes, and the demonstrations that followed were discussed. At the end of the meeting, students shared that it was new to them to talk in such a way about a book and to share ideas about ethical questions relevant in their own lives.

The group picked the South Korean movie *Parasite*, awarded with four Oscars, as the first movie to watch. This movie was confronting. The group related the movie to the various effects of the pandemic on different groups. They discussed their own situation during the pandemic, and they also tried to compare their situation to the situation of others, like, for instance, refugees. There were discussions about ethics and inequality and inclusion. Also, geographical elements of the movie were discussed.

The group also decided to watch two episodes from a Dutch documentary series about China made by Ruben Terlou and Maaïke Krijgsman. The conversation had geographical content. Students also talked about the way questions were asked by the documentary maker and if their views on China were altered. Students shared personal points of view. In addition, the students talked about whether they missed the "other" honors students from the other departments. They surely did. They were also interested in a conversation with a more interdisciplinary group. So, it was decided to organize a film meeting honors seminar for the whole honors group of the Geosciences Honours College. The students picked two episodes from the documentary *Walking the Americas*.

The interdisciplinary session was organized once on the Microsoft Teams platform and was visited by 38 students and 3 teachers. The language was English. Compared to the

disciplinary session, less students shared easily, and periods of silence were longer. However, students stayed active during the two-hour optional session. They shared that they liked hearing new ideas, that they learned a lot, and that they were happy to meet and greet each other. Also, a new date was planned for the whole group for the end of June. In the meantime, the disciplinary group of Human Geography and Spatial Planning honors students were meeting almost weekly.

6. Findings

Although students did not meet physically, it became possible to create a feeling of community through sharing experiences. In co-creation, students and the teacher (honors director) created a new kind of online seminar.

It is interesting to note that the participation rate was high; almost all the students attended the online meetings, although the meetings were not obligatory and there were no consequences for not showing up. The students were satisfied with the online meetings, and they seemed to appreciate the moments in which they could share what they are currently experiencing during the pandemic. By creating an open and safe environment, students feel like sharing their stories. They connect through online bonding.

Students co-created the program, which seemed to empower them. They were engaged in the preparation, the meetings, and in the follow-up. Students wanted to see and speak to each other. They created and maintained a community by talking about their wellbeing and sharing ideas how to feel good. Students expressed that they got new insights by talking about the documentaries. Also, they shared that seeing different points of view about the same movie functioned as an eye-opener.

By sharing their ideas about a movie or documentary, critical thinking was needed. Students were confronted with different tastes and various ideas and learned to appreciate the dignity of difference. Also, content-wise, students talked in depth about the documentaries, like, for instance, about different ways the presenter of the documentary tells his story and why. The group talked about whether they could see and analyze how the documentary maker handled stereotypes and what kind of philosophy was shared with the audience. Students indicated that they were looking for connections between real life, ethical—and actual—issues and the documentary or movie. Therefore, students proposed that the coming documentary to be discussed be 13th (Netflix) to get more insight into the institutionalized racism in the USA.

Students indicated that they enjoyed the meetings, and especially the community feeling. They showed that not only by words but also by actions. For example, already at the start of the co-creation sessions, students indicated whether they were going to join the first book meeting or not. However, some days before the actual book meeting via WhatsApp, all students informed each other and the teacher again. They said not only that they were not joining, but they also gave their personal reason why they were not joining.

7. A look ahead in the future

It is unsure how long it will take until students can come together in large gatherings. After the summer holidays, starting in July and ending in September, honors students can be

asked again what they would like to do and how they would like to fill their honors program. It might be possible that most of the students have adapted to the situation and do not feel as distressed as they did at the beginning of the COVID-19 outbreak. Perhaps they would like to be challenged more.

The need for community building is evident. Honors students want and need an honors community. If this cannot be done on campus, people will look for online ways. Honors made a case: creating community during a pandemic is possible.

Online community building is not the same human experience as face-to-face community building. However, the book and movie meetings are an example of how community building may work while teaching remotely. Co-creating asks collaboration and specific preparation. It adds up. The authors can say that although the workload is heavy, co-creating these courses gives satisfaction. In addition, co-creation gives a (shared) feeling of responsibility and motivates students to attend the meetings.

8. Conclusions

Students are able and willing to co-create online honors courses during the pandemic. The focus on the wellbeing of the honors students makes sure students do not experience more stress by following the honors program. By giving the honors students the possibility to decide what they would like to do and how to discuss, and by sharing the responsibility, the online meetings are moments of connection and reflection. Instead of focusing on the requirements of the honors program, it is decided to focus on community building that is less related to the students' studies.

It is recommended for other institutions to see if it is needed to focus more on community building than on passing the requirements of the honors program. This reflection can be done by just asking the students what they would like to do and what they need to reach those goals. In times of a pandemic, it might be a good to focus on wellbeing instead of on challenging students. It might be wise to focus on community building instead of enhancing academics. It might be interesting to focus on actual ethical issues instead of programmed content and testing.

These times of the COVID-19 pandemic showcase the need for flexibility, community, and conversation. There is a need for an ability to adjust and to be open to act upon continuous change. It is unsure how the situation will be in the future and what the needs of the honors students will be. Therefore, by staying in touch with honors students and by continuously asking how they are doing and what their needs are, the honors program will be adapted to the new situations and needs of honors students.

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References

Bovill, C. (2013). Students and staff co-creating curricula: An example of good practice in higher education? In E. Dunne & D. Own (Eds.), *The Student Engagement Handbook: Practice in Higher Education*, (pp. 461- 475). Bingley: Emerald Publishing.

Kirsh, D. (2000). A few thoughts on cognitive overload. *Intellectica*, 1(30), 19-51.

Utrecht University (n.d.). Cijfers en feiten. Retrieved on May 16, 2020 from:
<https://www.uu.nl/organisatie/profiel/cijfers-en-feiten>

Veld, A. van 't, Beerepoot, R., Kanne, P., Stel, M., Vries, P. de, & Kuttschreuter, M. (2020). Het corona- en het eenzaamheidsvirus (043). Amsterdam: I&O Research.

Wolfensberger, M.V.C. (2012). *Teaching for Excellence: Honors Pedagogies Revealed*. Münster: Waxmann.



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Paper

Assessment of the impact of COVID-19 on honors student learning, institutional connections, and intent to return to campus

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Abstract

The COVID-19 pandemic quickly converted classes to an online format in the middle of the academic semester at South Dakota State University (SDSU), USA. Our objectives were 1) to identify factors affecting student learning and connectivity following this transition and 2) to evaluate differences between honors and non-honors students. Students (n=230) were surveyed with Likert-type, descriptive, and open-ended questions about their experiences following the transition. Clear, frequent communication between students and SDSU was identified as the most appreciated aspect of SDSU's response. Students who reported struggling academically following the transition were more likely to be facing difficulties with finances and access to or use of online learning technology. Honors students reported fewer technology barriers and financial stressors than non-honors students. Degree completion and social connections were driving the desire to return to face-to-face classes, but this enthusiasm was dampened by COVID-19-related health concerns. Communication, structure, and flexibility were identified as factors affecting student success.

Keywords: COVID-19, honors education, online learning, connection

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1. Introduction

In the wake of COVID-19, higher education institutions have been faced with unprecedented challenges. In spring of 2020, students, faculty, staff, and their families transitioned to an online environment abruptly and faced negative impacts of transition. Past outbreaks of disease, such as MERS and SARS, brought with them concerns of impacts on financial, mental, and physical health, and quality of teaching and learning in distance environments (Al-Rabiaah et al., 2020). The 2020 COVID-19 pandemic is no exception. Assessment of student perceptions of this pandemic and their ability to pursue academic success while maintaining connections to their institution are valuable in understanding how universities can better prepare for future disruptions.

A growing concern in colleges, especially among honors students, is mental health (Pham, 2017). COVID-19 and the transition to distance education has introduced new and dire concerns. A study of Chinese university students estimated that 25 percent experienced new anxiety resulting from COVID-19 (Zhai & Du, 2020). Living alone, altered or limited access to counseling and support services, disruption of academic environment, degree completion delays, and family or friends falling ill are all concerns that increase students' risk of developing anxiety disorders (Cao et al., 2020; Zhai & Du, 2020). Also, many students have experienced cancellations or postponements of internships, jobs, and post-graduation plans. According to crowd-sourced data from Canada, up to 86 percent of students that experienced these cancellations reported worrying about their financial wellbeing (Wall, 2020; Zhai & Du, 2020).

Distance education is a commonly debated practice in honors education. Under normal circumstances, distance learning is rare in honors education, as it seems to go against common practices of hands-on, interactive, engaging curricula. Supporters of online education assert that quality honors education can be achieved through proper faculty training, planning, and support (Nightingale, 2014; Zubizarreta, 2020). However, the sudden transition to distance education due to COVID-19 was anything but planned. Emergency online teaching came abruptly and left many faculty members without sufficient support, for existing infrastructure was not designed to support full-time online instruction. While typical online courses take six to nine months to plan, the sudden shift was completed in only a few weeks (Hodges, Moore, Lockee, Trust, & Bond, 2020). Thus, neither faculty nor students had the benefits of structured planning for success in online teaching and learning.

The purpose of the current study was to understand the post-COVID-19 experiences of our students with the intent of using their feedback to refine and improve possible hybrid and online transitions for future courses which are traditionally offered face-to-face. Our objectives were to determine:

1. Factors affecting student learning during COVID-19
2. Whether students continue to feel connected to SDSU
3. Key factors impacting students' decisions to return to campus next year
4. Differences among honors and non-honors students

While the current study is focused on the impact of COVID-19 in honors and in higher education, there are broader implications for understanding student preferences and learning ability in online or rapidly changes formats. Honors education is often touted as

being nimble and innovative. The results of this study emerged from an opportune moment to collect student insight during a global pandemic and one that caused significant and sudden changes in educational formats. If honors education is to remain relevant, curricula and pedagogies must be nimble in the face of acute change and innovative in designing ongoing positive shifts in higher education.

2. Methods

2.1 Survey design and distribution

This survey has been adapted with permission from the © 2020 Higher Education Data Sharing Consortium (HEDS). HEDS is an independent, not-for-profit consortium of higher education institutions that aims to improve undergraduate education by serving as a platform for shared data and knowledge. They conduct periodic nation-wide surveys on student success, diversity, research practices, and campus climate. By adapting the survey from the HEDS, this project was able to incorporate certain questions that were already tested and utilized at the national level. The research team obtained approval under the SDSU Center for the Enhancement of Teaching and Learning, Scholarship of Teaching and Learning Umbrella IRB (Institutional Review Board). The QuestionPro survey included 22 substantive and five demographic questions (see Appendix A). Among the 22, seven were descriptive, six were open ended, and nine were Likert-type questions. The survey was delivered via email to all 2,023 students enrolled in the Honors College, the School of American and Global Studies, affiliated with the ADA (Americans with Disabilities Act) or multicultural centers, and to those enrolled in one of our TRiO programs. These are federally mandated programs that aim to provide a supportive and welcoming university experience to less advantaged students, including minorities, low-income, and first-generation college students. This distribution allowed us to not rely exclusively upon the honors students. The survey was delivered during the first week of May when final examinations were in session and remained active for three weeks. During this period, 573 students viewed the survey, and, of those, 230 (40 percent) fully completed it, yielding an overall response rate of at least 11.4 percent. The response rate could be higher, since some students belonged to more than one of the targeted groups the survey was sent to, and the list was not vetted for duplicates. SDSU is the largest and most comprehensive land grant university in South Dakota with over 11,500 students from all 50 states and 83 countries pursuing degrees in 82 undergraduate majors, 36 master's programs, and 15 doctoral programs.

2.2 Quantitative analysis

Two separate quantitative analyses were completed. In the first analysis, students were placed into one of four categories based on whether they self-reported struggling academically before and after the transition to online classes during the COVID-19 pandemic:

Group 1: Those who struggled before and after COVID transition (n=13)

Group 2: Those who struggled only before the COVID transition (n=6)

Group 3: Those who struggled only after the COVID transition (n=99)

Group 4: Those who did not struggle before or after the COVID transition (n=123).

The above sample exceeds 230 students who completed the entire survey, because students who did not answer all questions *but* answered this particular question were included in this analysis. Because of the small sample size for the first two categories, they were not

analyzed further in this first quantitative analysis only. A t-test statistic was used to compare responses to 41 questions between Group 3 and Group 4 with R software. The number of questions exceeds that reported above because most of the 9 Likert-type questions asked for feedback about more than one factor that could affect a student's experience. For example, one Likert question asked about time spent on different tasks (e.g., studying, working) and each task was treated as a different question in the quantitative analysis. A P value < 0.05 was our threshold for statistical significance; however, Bonferroni-corrected P values are also reported. In the second analysis, honors ($n=126$) and non-honors ($n=116$) students were compared with a t-test as described above. As before, the above sample exceeds 230 students because students who answered this question but did not answer all questions were included in this analysis. Students who reported intent to graduate with honors distinction were categorized as honors students and students who did not were categorized as non-honors students.

2.3 Coding and thematic analyses

In this project, the intention was to capture and reflect the student experience as accurately and transparently as possible. Therefore, a significant portion of the survey consisted of open-ended questions. When coding these, an inductive coding approach was implemented (Linneberg & Korsgaard, 2019). Instead of imposing *a priori* categories to the answers, phrases directly used by the students were selected. While the initial round of coding created nearly a dozen categories for each question, in the second round, similar categories were clustered together to generate higher level categories that would help with a more parsimonious analysis. In order to strengthen the reliability of our coding, two team members separately coded the data in the first round. Their results were systematically compared before moving on to the second round. Of the six open ended questions, scores of two team members were only two percent to five percent different from each other in the first round. A third team member also coded five percent of the answers for each of the open-ended questions separately, for a second test of reliability. The coding practices and results proved to be consistent among all team members.

Our thematic analysis was adapted from Braun and Clarke's (2006) method with team members openly discussing themes until reaching consensus. Each team member reviewed the open-ended responses independently prior to gathering to discuss results. Team members discussed potential themes, and two members of the team independently coded student responses based on the initial themes and revisited the themes alongside examples of initial coding. Finally, three team members commenced secondary independent coding, with team members identifying key participant quotes. Students who did not make comments in the open-ended questions were removed from the analysis. Coding from three investigators was compared, and, when two or more were in agreement, the average number of posts a student made within a category was calculated. The percentage of honors and non-honors students responding in each category was then calculated.

3. Results: Quantitative analysis

The majority of respondents (63 percent, $n=126$) reported intent to graduate with honors distinction. First-generation college students comprised 18.5 percent ($n=37$) of our sample. Survey respondents also self-identified as TRiO students (8.5 percent, $n=17$), living with a disability (7.5 percent, $n=15$), and student-athletes (8 percent, $n=16$). Our TRiO programs are

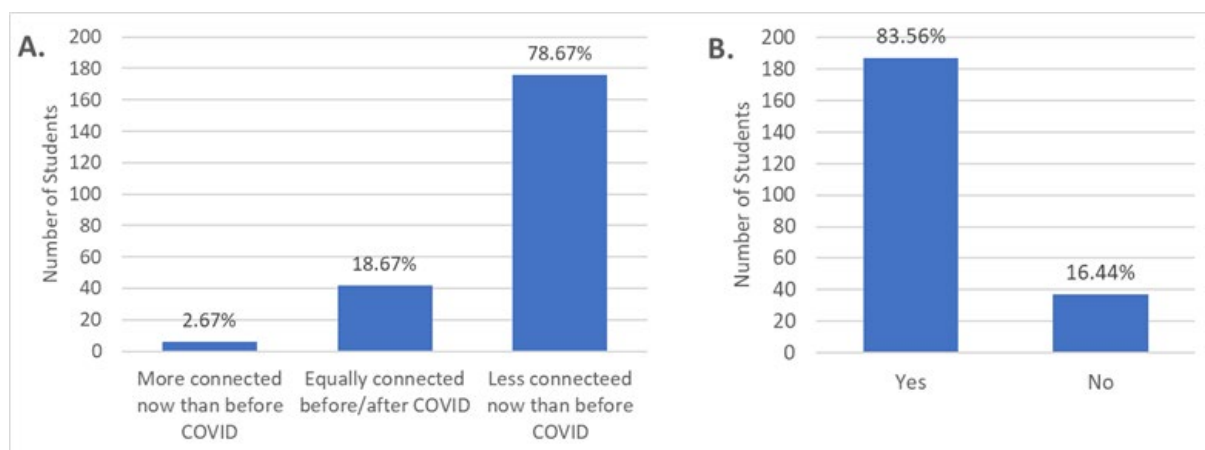
designed to increase access, preparation, and success of first-generation college and economically disadvantaged students, whereas athletic teams are a component of many US colleges and universities. Percentages exceed 100 percent because students can self-identify with multiple groups.

The majority of respondents self-reported as white (90.75 percent, $n=206$), with minorities of American Indian or Alaska Native Asian (3.52 percent, $n=8$), Black or African American (4.41 percent, $n=10$), and Native Hawaiian or Pacific Islander (1.32 percent, $n=3$). Eight percent of respondents identified themselves as Hispanic or Latino/a/x ($n=18$). These demographics are consistent with demographics of South Dakota State University in the 2019-2020 academic year. Seventy-five percent of respondents also self-reported as female ($n=167$).

Students who reported not struggling academically before the transition to online classes were divided into two categories: 1) those who struggled academically after the transition ($n=99$) and 2) those who did not ($n=123$). Responses to 22 substantive survey questions were different between these groups ($P < 0.05$; Appendix B). Among these, responses to five questions were highly significantly associated with whether students reported struggling academically after transitioning to online classes: faculty care and concern for the student, satisfaction with support received from SDSU during the transition, concern with performance in online classes, worry about paying bills, and ability to participate in live or synchronous class activities because of other obligations (Bonferroni $P < 0.0014$). Students who reported struggling also reported decreased satisfaction with communication about the transition to online classes, increased difficulties with technology and internet access, and increased worry about basic living necessities (e.g., food, housing). Post-COVID-19 academic struggles were not associated with use of student services or perceptions of whether certain types of instruction were more or less challenging in an online environment, except for perceptions of group work ($P = 0.023$).

The abrupt transition to an online environment resulted in students feeling less connected to campus (Figure 1A). However, the majority of respondents also believed this level of (dis)connection was appropriate given the circumstances (83.56 percent; Figure 1B).

Figure 1: (A) Student reflection on how connected they feel to campus, and (B) level of appropriateness of connection.



Students who reported struggling after the transition to online classes were more likely to believe the level of connection was not appropriate ($P = 0.0046$). Honors students were not more or less likely to believe the level of connection was appropriate than other respondents in the survey ($P = 0.473$).

Responses to 15 questions (seven questions if using the more stringent Bonferroni correction) on the survey were significantly different ($P < 0.05$) between honors and non-honors students (Table 1). Honors students were generally less concerned about economic issues after the transition to online learning, including paying bills, housing, healthcare, and food security. They were also less likely to report technology or accessibility problems. Honors students reported being able to participate in live or synchronous class meetings more often than non-honors students. When asked if students felt 1) more connected, 2) equally connected, or 3) less connected after COVID-19, honors students reported feeling less connected (2.82) than non-honors students (2.69) after COVID-19 (t-test = 1.99; $P=0.0475$).

Many of the questions where responses differed between honors and non-honors students were the same questions where responses differed between students who reported struggling after transitioning to an online environment as compared to those who did not report struggling after the transition.

Table 1. Comparison of students who self-reported as 1) intending to graduate with Honors distinction (n=126) and 2) not intending to graduate with Honors distinction (n=116).

Honors Students:	Mean Honors Students	Mean Non-Honors Students	t-test	P^1
Believed staff and administration showed more care and concern ²	4.30	3.93	3.45	0.0007 [†]
Were less worried about doing well in college after switching online ³	3.06	3.44	2.48	0.0139
Were less worried about technology problems ³	2.06	2.53	3.14	0.0019
Were less worried about whether course materials were in a disability accessible format ³	1.46	1.98	3.57	0.0004 [†]
Were less worried about access to health care ³	1.56	2.05	3.26	0.0013 [†]
Were less worried about paying bills ³	2.27	2.86	3.40	0.0008 [†]
Were less worried about housing ³	1.25	1.64	2.64	0.009
Were less worried about food insecurity ³	1.29	1.77	3.31	0.0011 [†]
Were more comfortable using Zoom ⁴	3.75	3.46	2.08	0.039
Were less likely to experience problems with accessibility formats for disabilities ³	1.18	1.48	2.96	0.0036
Were less likely to experience problems with technology ³	1.51	1.88	2.76	0.0064
Were less likely to experience problems with sharing technology ³	1.40	1.67	2.10	0.0372

Were less likely to experience problems with scanning or printing course materials ³	1.93	2.56	3.49	0.0006 [†]
Had fewer problems attending live or synchronous class meetings ³	2.15	2.55	2.50	0.0134 [†]

¹ Only responses exceeding nominal significance level of $P < 0.05$ reported; [†] = Bonferroni $P < 0.0014$ ($n=37$).

² Responses coded as 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

³ Responses coded as 1 = never, 2 = once in a while, 3 = about half the time, 4 = most of the time, and 5 = always.

⁴ Responses coded as 1 = very uncomfortable, 2 = uncomfortable, 3 = neutral, 4 = comfortable, and 5 = very comfortable.

4. Results: Qualitative analysis

The first and overarching theme of *teaching and learning* stood out in student comments, likely due to the nature of the open-ended questions. Access to and preferences for *technology* were common, as were those related to *health and safety*. The final theme was the *social and economic impacts* of COVID-19. Multiple themes were often addressed in a single response, indicating that the intersectionality of these themes during COVID-19 could either enhance or detract from student success. Thirty students who did not respond to open-ended questions were excluded from qualitative and thematic analyses.

4.1 Teaching and learning via technology in the COVID-19 era

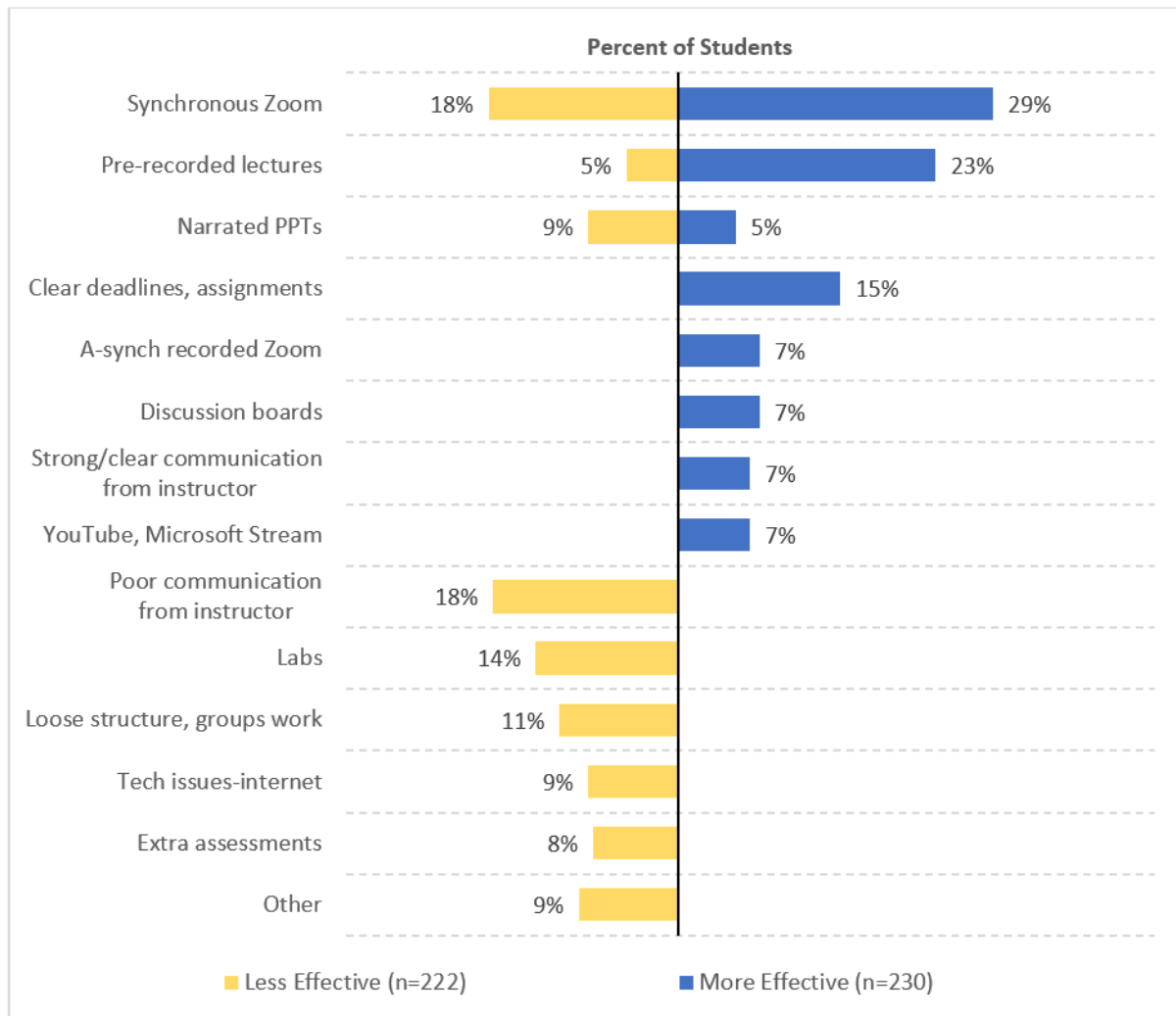
Hallmarks of effective teaching and learning prior to COVID-19, such as strong and timely communication, clear organizational structure and expectations, and accommodation of multiple learning styles, continued to resonate for students during the transition. Active learning supplements to recorded lectures were appreciated, provided they did not make undue additions to the pre-COVID-19 workload. Students recognized when instructors were willing to adapt their approaches to meet student needs, including additional or flexible office hours. One student commented, “[To] those that have made necessary changes - given more time during exams, extra help sessions, etc. THANK YOU.” Another said, “This has been hell as someone who avoids online courses like the plague, but my professors have really pulled out all the stops to make it work.”

Synchronous Zoom lectures were both the most and the least favored instructional method (Figure 2). They provided real-time access to professors and peers, timely feedback to questions, as well as a sense of community and weekly structure. However, for a significant portion of the students, obligations such as work or sibling care made synchronous lectures less convenient. This second group appreciated asynchronous formats due to their flexibility and accommodating nature. Clear preference was expressed for shorter lectures with plenty of visuals over long lectures without much visual stimuli. Shorter recorded lectures “worked much better for learning the material because I could spread out studying which increased my retention of the material.”

Laboratories, clinicals and other hands on experiences did not work well after the COVID-19 transition; pre-existing problems were exacerbated, and new problems arose. Numerous comments addressed frustration surrounding learning laboratory techniques online, stating it was no longer “the real experience.” This quote sums up the student sentiment: “I don’t

think reading about the labs I was supposed to perform was effective as interpreting the results did not allow for me to understand the test and how it is performed.”

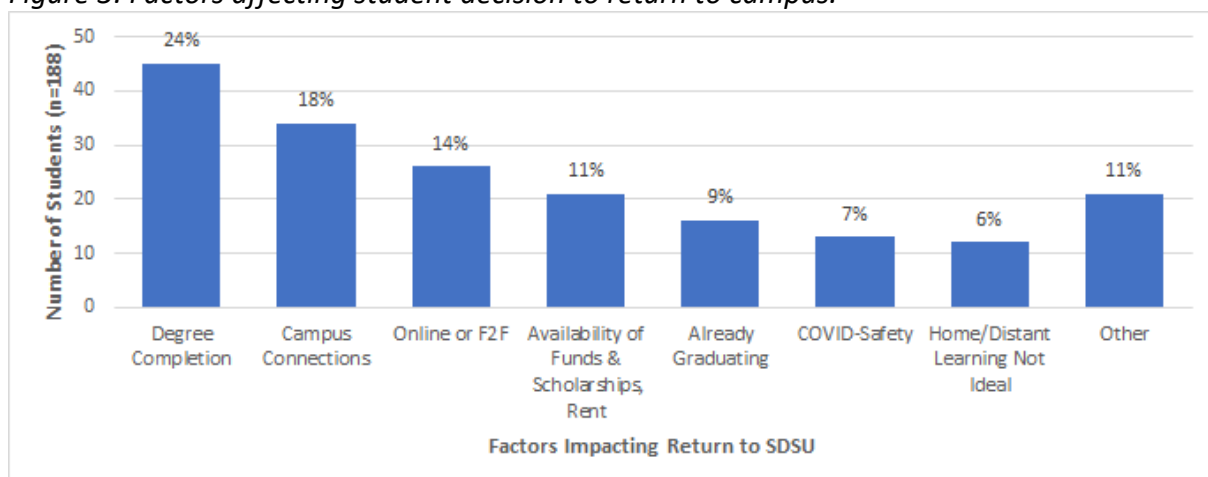
Figure 2: Student reports on instructional methods (delivery, technology, assignments, and communication from faculty) that worked the best post-COVID transition (blue bars) and those that did not work well (yellow bars).



Students were adamant that the workload associated with classes should not be changed drastically, except to eliminate ‘busy work’ or assignments that they perceive as having a high time investment to learning value ratio. *“Moving home, I have a plethora of other responsibilities to take care of... Lowering academic standards should not happen but lessening busy work should have been done in a time such as this.”* Pre-professional students were concerned about their level of preparation for the workforce. One respondent said, *“My biggest worry is that the education I am currently getting is not the same quality of education that I would have gotten face-to-face. I am most concerned that I will become an inadequate healthcare professional.”* Others expressed frustration when faculty reduced content and thus the return on investment of their tuition. Students perceived the educational and financial value of online education inferior and felt those should be offered at a discount.

Students craved structure coupled with flexibility in their courses. One student said, *“The transition to online was made a lot easier when professors made their expectations clear and maintained good communication, so I felt supported and knew what I was doing.”* A consistent organizational structure across courses was desired so that information regarding each course could be found in the same location. Even though most universities utilize platforms such as *Desire2Learn* or *Blackboard*, significant variation in their use existed among instructors. While some students preferred the steady flow of communication via learning management systems, others felt overwhelmed by the volume of email traffic or struggled to keep up due to lack of connectivity or access to devices. Independently motivated students thrived in transition: *“I liked the independence of learning online, like the recorded lectures and [weekly] deadlines... I am pretty good with time management and was able to stay organized enough to hand in all my assignments on time.”* Synchronous methods were preferred by those craving social interaction since it *“preserved the classroom dynamic and interaction”* and by those who self-recognized a need for structure: *“Online classes are my Achilles heel...but scheduled synchronous classes offered me some structure at least.”* Some students preferred the familiarity of the lecture setting and opted for live or recorded lectures. Seeing the professor and viewing notes and drawings made by the professor were commonly preferred to a voiced-over PowerPoint where students could hear the professor but had only slides to view. Most indicated that having recordings or notes posted enabled them to review and study better. Students craved a familiar, pre-COVID-19 approach; those from didactic courses felt disheveled if they needed to transition to more self-directed learning. Those who did not have prior experience with online learning were particularly distressed without explicit guidance: *“as a new international student I am fully new to online education but most of the teachers went on as if I knew everything and that really gave me hard times understanding what was going on.”* Degree completion, campus connections, and hopes for face-to-face formats were the primary reasons students plan to return to SDSU in the Fall (Figure 3). While a small group highlighted COVID-19 as their top criterion for making a decision (n=13), an almost equal number of students expressed their strong desire to come back to campus. This response was largely due to their negative views of online learning at home. These students mentioned lack of motivation and used words like *“isolation”* to describe their situation at home.

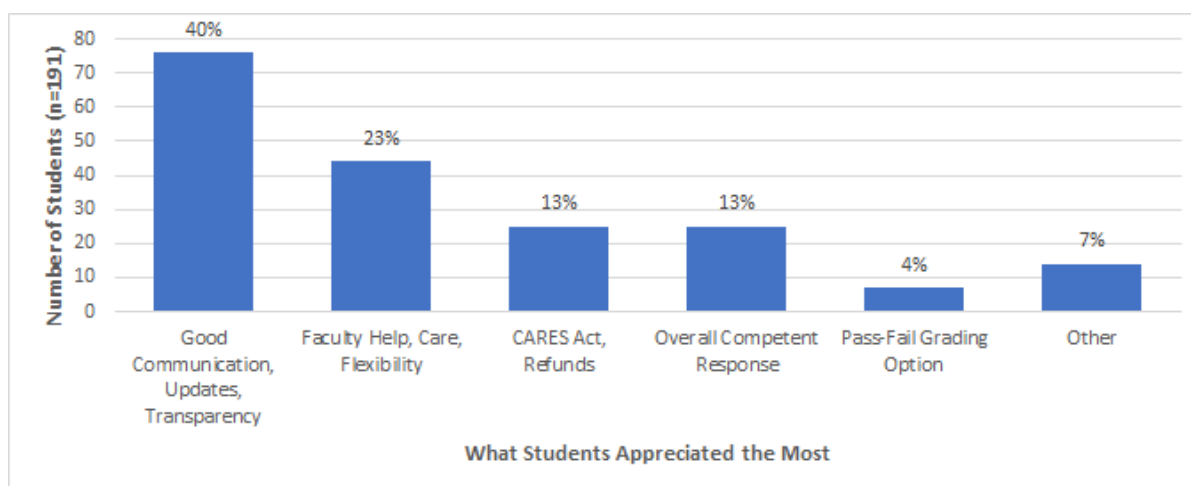
Figure 3: Factors affecting student decision to return to campus.



4.2 Social and economic considerations in the COVID-19 era

The timing of COVID-19 affected university operations during spring break. Many campuses across the US made the decision to remove students from campus housing and closed access to their campuses. Several students noted their appreciation of the process by saying, *“I appreciated how SDSU used multiple platforms to inform various groups about what was going on. I am also glad that students did not come back to Brookings after spring break, as that would have brought a larger chance of spreading COVID-19 to the area.”* University housing returned students strategically to help minimize the risk of exposure for all stakeholders: *“When moving out of the dorms, they gave us time to prepare about a week between announcing the move out schedule and the move out days beginning.”* Meanwhile, students were pulled into many directions. Some had to care for siblings, sick parents, and contribute to household chores. One shared: *“I’m currently back with my parents and they don’t understand that I have school and schoolwork ... They want me to ... clean the house and visit grandma all the time.”*

Figure 4: Student reflection on SDSU’s response to COVID-19.



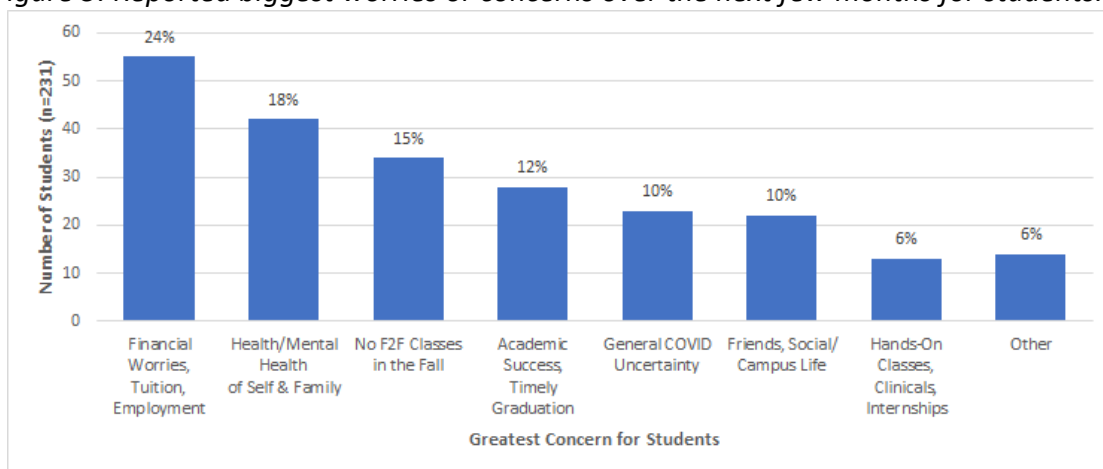
In times of uncertainty, SDSU students praised the effective communication efforts. Regular email messages and videos from the president helped them feel that the crisis was handled with transparency. Timely emails and updates from the university made students feel in the loop, well-informed, and respected. The second most frequently mentioned factor was the faculty help, support, and care. Students definitely appreciated the outreach of the faculty and the accommodations they provided (i.e. extra review sessions, more time for tests, etc.). Financial compensations and refunds were the third favorite. Students expressed appreciation for their timeliness (Figure 4).

In the coming up months, serious concerns continue to rise on the horizon. Economic issues seem to dominate the students’ agenda. They worry about paying for school, having sufficient funds to cover their bills, and expenses. Finding employment during school and the job market upon graduation are frequently articulated concerns (Figure 5). After the move-out process, another key issue was how the swift transition impacted them financially, emotionally, and mentally. Many highlighted the university’s ability to maintain essential services, such as counseling and dining. Adjusting to the “new normal” required new and

creative solutions that addressed multiple issues simultaneously. Survey responses noted the importance of both flexibility and maintaining academic integrity. This quote from what students appreciated the most illustrates the intersectionality of academic, economic and health & safety concerns: *“The option for S[atisfactory]/U[nsatisfactory] grading and the move out process that adheres to social distancing rules. Also refunding for the unused housing and dining and parking.”*

Students who already invested multiple years into their education at SDSU were committed to staying and finishing their degrees: *“SDSU has all the opportunities and open doors that I’ve been building the last two years. I just want it to be back to normal, but I would do anything to be back at SDSU with my wonderful professors and fellow classmates. The people are the biggest influence.”*

Figure 5: Reported biggest worries or concerns over the next few months for students.



4.3 Health and safety in the COVID-19 era

Health issues follow the economic concerns. Students worry about large-scale spreading of the pandemic and its consequences for their health, including their mental health. Not having face-to-face classes in the Fall ranks as the third cause of worry for the students, followed by their concern about grades based on their initial experience with online learning (Figure 5). This group does not seem content about their academic performance after the sudden transitions due to COVID-19 and worry that it may negatively impact their timely graduation. General uncertainty about the progress of the COVID-19 and its negative impact on their social lives, friendships, and connections stand out among the causes of worry. Students who rely on more hands-on forms of learning such as internships, shadowing, and clinicals also express significant concern in the coming months.

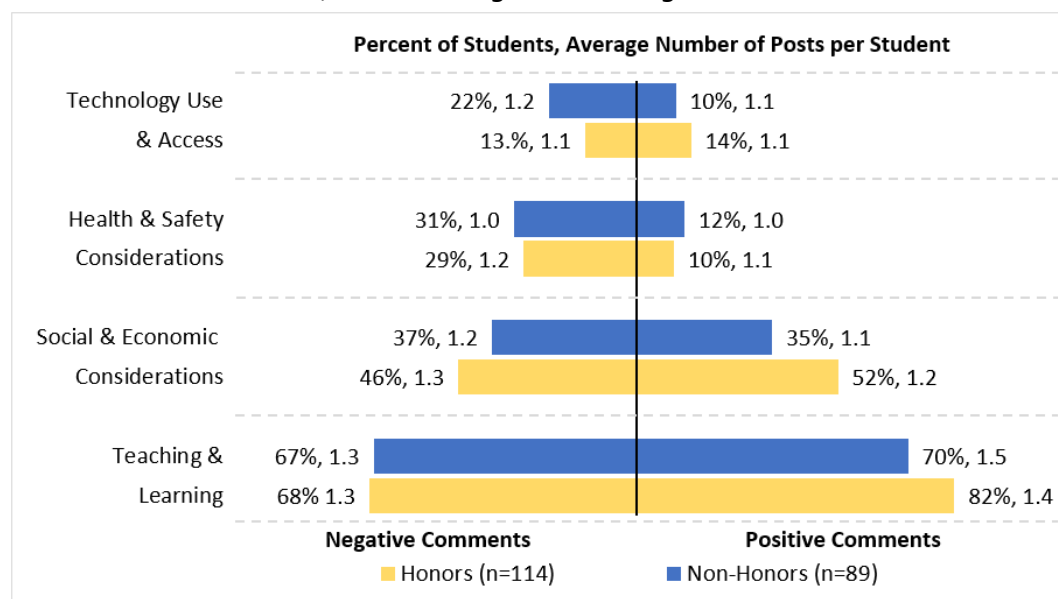
Many students expressed concern for their mental health, as well as the health and safety of their family members. COVID-19 brought to light many concerns of underrepresented or marginalized communities: *“My parents getting sick at work or me getting sick at work and then infecting them”* illustrates the compounding nature of health problems. Students also express increased challenges to perform well academically, due to serious health problems. As noted, *“I am immunocompromised, so even if others were able to return, I may not be able to, and I think it would be significantly worse to be online when everyone else is face-to-*

*face than when everyone is online.” They worry about a “second wave”: “Whether or not it is actually safe to return to on-campus living; a residence hall is a breeding ground for such a virus and the thought of living in one now terrifies me.” Students point to the abrupt changes in the academic setting compromising their mental health. For some students, the campus environment may be safer than their home environment. When asked about whether or not they would come back to SDSU next semester, one student responded: “I have nowhere else to go.” At the onset of COVID-19, employment opportunities for students plummeted. Federal regulations limited off-campus employment opportunities for international students. Some students faced serious challenges to access basic needs, including housing instability and food insecurity. These fears can lead to a mistrust of the decision makers as noted by a respondent: “... SDSU raised all of the money for the student emergency fund and we still have international students going hungry which makes me want to know where that money is truly going.” Another asked a series of questions: “will I be able to get a job to pay for food and tuition for this fall, can my GPA take another semester of online classes, are my friends ok mentally, is it even safe to get a job (doesn't matter I need one), etc.” The uncertainty and insecurity seemed to be an overwhelming theme as students coupled their studies with progressively lessening resources, friends, and support. Even when the university had emergency measures in place, such as the food bank on campus that provided free food to students, including international students, there is no guarantee that the information about such a relief would reach to *all* students in need, given the extraordinary circumstances during the pandemic.*

4.4 Honors vs. non-honors trends

Of the 30 students who did not respond to open-ended questions, 40 percent were honors and 60 percent were non-honors. When asked about their intention to return back to campus, honors and non-honors students were equally willing to return to campus in the fall. While 75 percent of the honors students stated that they would “*definitely*” return to campus in the fall, and another eight percent stated they would “*probably*” come back, for the entire sample, these percentages were 71 percent and 11 percent, respectively. In short, over 80 percent of the students we surveyed, both honors, and non-honors students, intended to continue their education at SDSU in the fall semester. The percentage of honors and non-honors students who directly supported overall themes of technology use and access, health and safety concerns, social and economic considerations, and teaching and learning are reported in Figure 6, along with the average number of positive and negative comments made by an individual in each of the four categories. Despite reporting less financial strain than non-honors students in the quantitative portion of the survey, more honors students shared more positive comments and negative comments about social and economic considerations than non-honors students. The final question provided students with an opportunity to share any additional comments. Eighty-five percent of honors students expressed appreciation for the support of staff, 95 percent shared positive summative comments, and 85 percent shared negative summative comments. Similar populations of non-honors students shared positive summative (91 percent) and negative summative (92 percent) comments, with 78 percent expressing appreciation for staff.

Figure 6: Percentages and posts made by honors and non-honors students in each of the four major themes: technology use and access, health and safety considerations, social and economic considerations, and teaching and learning.



5. Discussion

5.1 Characteristics of students reporting struggling academically after COVID-19

Institutions of higher education must remain vigilant about the impact of the pandemic, particularly on the marginalized and underrepresented students. How we respond during this crisis will directly influence their future enrollment, persistence, and perception of higher education. Several broad trends were identified among students who struggled after the transition to an online environment. It is clear that these students desired improved communication. A comprehensive plan for communication from university administration, faculty, and staff could easily address this issue. These students often reported greater worry over finances, including the ability to pay bills, food, and housing. It is unclear to what extent financial problems played a role in academic success in this instance, but academic performance has long been associated with financial stress (Fosnacht & Calderone, 2017). Continued efforts towards more scholarships, financial aid packages, and teaching personal finance may improve academic performance by relieving financial stressors.

A significant challenge for this group was accessing and utilizing technology in the online classroom environment. It is possible that students may not be able to afford technology. They may lack access to high bandwidth internet, which is a key prerequisite of strong academic performance. Potential solutions could be to continue expanding internet access particularly in rural areas, design activities and assessments that require less advanced technology, and to improve training for students on the use of instructional technology. Our results also support the need to design activities and assessments that do not exclusively rely on live or synchronous class attendance.

5.2 Characteristics of honors students

Honors students reported less worry about financial stressors and technology problems. It is not possible to accurately predict why this result was observed from our data. Honors students at SDSU had higher academic performance in secondary schools than the average student at SDSU. While financial incentives are not provided for enrolling in the Honors College, high-achieving students may have received other performance-based scholarships. Honors students could be inherently motivated and/or conditioned through honors education to approach challenges nimbly, and thus, may be more likely to successfully access and utilize instructional technology. It should be noted that the sample of respondents was not random, which could contribute to the reported differences. The survey was distributed only to students who were members of particular groups on campus: students intending to graduate with honors distinction, TRiO students, students with disabilities, and students who were enrolled in the School of American & Global Studies. Indeed, some of the targeted groups would be more likely economically disadvantaged or first-generation college students. For example, most first-generation college students were not honors students among our respondents. Of 126 honors students, only nine were first-generation college students (n=37).

6. Conclusions

Students revealed myriad factors impacting their ability to learn as well as their preferred methods of learning online. Many craved organizational structure and clear instructions from instructors while maintaining flexibility to address the additional technical, social, health, and economic related factors in their lives that had been impacted by COVID-19. Although statistically honors students faced less obstacles as a result of the transition to distance learning, they expressed similar concerns to those of non-honors students regarding their wellbeing. Despite the abrupt and drastic changes experienced this Spring, we are encouraged by this student's words: *"I appreciate the fact that we didn't stop learning."* Institutions of higher education must weigh both the pros and cons of creating the safest possible learning environment for all students. Based on our findings, we advocate that university administrators, faculty, and students collaborate to ensure:

1. Effective communication and social connections
2. Fiscal means for housing, food security, and tuition
3. Flexible and accessible infrastructure to support continued academic success
4. Safety of students, staff, and loved ones.

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References

Al-Rabiaah, A., Tamsah, M. H., Al-Eyadhy, A. A., Hasan, G. M., Al-Zamil, F., Al-Subaie, S., . . . Somily, A. M. (2020). Middle east respiratory syndrome-corona virus (MERS-CoV) associated stress among medical students at a university teaching hospital in Saudi Arabia. *J Infect Public Health*, 13(5), 687-691. <https://doi.org/10.1016/j.jiph.2020.01.005>

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa

Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Res*, 287, 112934. <https://doi.org/10.1016/j.psychres.2020.112934>

Fosnacht, K., & Calderone, S. M. (2017). Undergraduate financial stress, financial self-efficacy, and major choice: a multi-institutional study. *Journal of Financial Therapy*, 8(1) 7. Retrieved from <https://doi.org/10.4148/1944-9771.1129>

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*. Retrieved from <https://medicine.hofstra.edu/pdf/faculty/facdev/facdev-article.pdf>

Linneberg, M. S., & Korsgaard, S. (2019). Coding qualitative data: a synthesis guiding the novice. *Qualitative Research Journal*, 19(3), 259-270. Retrieved from <https://doi.org/10.1108/QRJ-12-2018-0012>

Nightingale, B. (2014). Teaching honors online at a public college. *Journal of the National Collegiate Honors Council--Online Archive*, 15(Spring/Summer 2014). Retrieved from <https://digitalcommons.unl.edu/nchcjournal/425/>

Pham, S. (2017). Addressing common mental health issues prevalent among honors college students. Western Michigan University, Retrieved from https://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=3904&context=honors_theses

Wall, K. (2020). COVID-19 pandemic: impacts on the work placements of postsecondary students in Canada. In (pp. [6] p.). Ottawa: Statistics Canada. Retrieved from <https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00022-eng.htm>

Zhai, Y., & Du, X. (2020). Addressing collegiate mental health amid COVID-19 pandemic. *Psychiatry Research*, 288, 113003. <https://doi.org/10.1016/j.psychres.2020.113003>

Zubizarreta, J. (2020). Using the online forum for honors learning. *Honors in Practice -- Online Archive*, 16, 216-218. Retrieved from <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1325&context=nchchip>

Appendix A. Survey questionnaire distributed to students for data collection.

SDSU Student Survey RE COVID-19

Contributors: SOS – Support Our Students Network, Honors Faculty, CETL Faculty Fellows

Objectives

1. Identify factors which enhanced/detracted from student learning during COVID-19
2. Determine whether students continue to feel connected to SDSU
3. Ascertain circumstances which may impact students' ability to learn effectively during COVID-19

Dear Students,

We know this spring has been challenging for everyone at South Dakota State University. We're sending this survey to check in and see how you're doing. We want to know how you feel about our response to COVID-19 and if there are things we can do to help you. We'd also like to know about your experiences with various methods of online instruction this term.

Your participation in this survey is completely voluntary. There are no penalties if you decide not to participate or if you choose to skip any questions. The survey has 27 questions (22 substantive and 5 demographic) and should take 10-20 minutes to complete. It is very important for us to learn your opinions. We anticipate no risks taking this survey.

Your responses will be strictly confidential and data from this survey will be reported only in the aggregate. No one will be able to link your responses to your name or other information that might identify you. This survey has been adapted with permission from the © 2020 Higher Education Data Sharing Consortium.

SDSU SOS – Support Our Students Network, Honors Faculty, and Center for Excellence in Teaching & Learning (CETL) Faculty Fellows collaborated for this Survey. If you have questions at any time about the survey or the procedures, you may contact Dean Rebecca C. Bott-Knutson at 605-688-5268 or by email Rebecca.Bott@sdstate.edu

We would appreciate hearing from you so we can get a better sense of how you're doing and ways that we can help. Thank you for your time.

1. Please indicate your level of agreement with each of the following statements SDSU. Use responses: Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree

- Overall, staff and administration at SDSU have shown care and concern for me as they respond to the spread of COVID-19.
- Overall, faculty at SDSU have shown care and concern for me as they make changes in their courses in response to COVID-19.
- I know people who I may contact if I have questions about how changes at SDSU in response to COVID-19 will affect my educational plans.
- I felt as though I was struggling academically before spring break.
- I felt as though I have been struggling academically since spring break.

2. Please indicate your level of satisfaction with SDSU about the following:

Use responses: Very satisfied, Generally satisfied, Neither satisfied nor dissatisfied, Generally dissatisfied, Very dissatisfied

- The support you are getting from SDSU to help you transition to taking your classes online
- The communication you are getting from SDSU about its ongoing responses to COVID-19
- The information you are getting about how changes at SDSU in response to COVID-19 will impact your ability to pay for college (e.g., financial aid, student loans, campus jobs)

3. Do you have reliable internet access during regular work hours?

Use Responses: Yes, I have very good internet access; Yes, I have internet access, but it is limited; My only internet access is through my phone; No, I don't have internet access; Other, please explain

4. Given the changes at SDSU caused by the spread of COVID-19, how often do you worry about the following?

Use responses: Never, Almost never, Sometimes, Often, Very Often

- Doing well in college now that many or all of your classes are online
- Losing friendships and social connections now that classes are online
- Accessing and successfully using the technology needed for your online classes
- Having access to health care
- Paying your bills (e.g., tuition, loans, rent, internet access, medical)
- Having a safe and secure place to sleep every night
- Having enough to eat day-to-day

5. Can you describe your use of the following learning supports before and after COVID-19?

Use Responses: I used this before COVID, I am using this after COVID, Never used this service, Prefer not to answer

- SDSU Counseling Services
- Tutoring Services
- SDSU Writing Center
- SDSU Office of Disability Services
- SDSU Testing Center
- SDSU Briggs Library online services

In this section of the survey, we want to explore your experiences with various methods of online instruction. These might include viewing videos online, using online discussion boards, doing quizzes and tests online, live group discussions on Zoom or other conferencing software, online narrated PowerPoint lectures, interactive simulations, virtual office hours, collaborative group project tools, virtual tutoring centers, online library materials, etc. We will use this information to improve our online courses. We appreciate your taking the time to tell us what's helpful and what's not.

6. Please identify whether each style of course was more challenging face to face, more challenging online, or equally challenging:

- Courses with a lab component
- Courses that require hands on learning (i.e. fieldwork, site visits, equipment use, etc.)
- Courses that have group/team projects
- Larger, lower division courses (i.e. SGR courses with 100 or more students)
- Smaller, upper division courses
- Courses that relied more heavily on discussion and participation

7. How comfortable are you with using Zoom as part of your learning experience?

Use Responses: Very Uncomfortable, Uncomfortable, Neutral, Comfortable, Very Comfortable

8. Did you experience any of the following technology access barriers during remote learning in response to COVID-19?

Use Responses: Never, Once in a while, About half the time, Most of the time, Always

- D2L/Zoom/Other Learning Website not working properly
- Course Content/Materials not in an Accessible Format for Disability
- Having the right technology to complete assigned work (i.e. computer camera, etc.)
- Sharing Device with others in household
- Ability to scan or print necessary course materials
- Participate in live/synchronous class activities due to other obligations

9. When the courses switched to online which of these online instructional methods have worked best for you, and why?

Response: open-ended

10. Of the online instructional methods that you have experienced, which ones have not worked well for you? Why do you think they were not effective?

Response: open-ended

11. Please answer the following questions by using the slider from 0 (minimum) to 10 (maximum)

- In general, how much do you prefer face-to-face classes?
- In general, how much do you prefer all online classes?
- How much do you prefer hybrid (part face-to-face, part online) classes?

This section has questions about your general well-being.

12. Overall, how much stress are you feeling about the potential consequences of the spread of COVID-19?

Little or none

Some

A great deal

13. How did the COVID-19 crisis impact the time you spend on the following tasks?

Use Responses: Less time spent now, Same time as before COVID, More time spent now

- Studying for your courses
- Paid work, employment
- Household duties or care of family members
- Help with family business (farm, ranch, etc.)

- Social time with friends

14. How connected do you feel to SDSU?

More connected than before COVID

Equally connected before/after COVID

Less connected after COVID

15. Do you feel that your current level of connection is appropriate for the circumstances?

Yes

No

16. Do you intend to return to SDSU next fall to continue and/or complete your education?

Definitely yes

Probably yes

Probably no

Definitely no

Unsure

Not applicable, because I am graduating

17. What factor is having the biggest influence on your thoughts about whether or not to return to SDSU next fall?

Response: open-ended

18. What have you appreciated most about SDSU's response to COVID-19?

Response: open-ended

19. What are your biggest worries or concerns as you think about what's coming up in the next few months?

Response: open-ended

20. Since the COVID-19 changes at SDSU, where have you spent most of your time living?

Use responses:

Dormitory or other campus housing (not a fraternity or sorority house)

Fraternity or sorority house (including college-owned housing)

Residence (house, apartment, etc.) within walking distance to campus

Residence (house, apartment, etc.) farther than walking distance to your institution

In another country

A living arrangement not listed above

21. What is your college classification for the 2019–2020 academic year?

Freshman/First Year

Sophomore

Junior

Senior

Graduate Student

Other: _____

22. Is there anything else you'd like to tell SDSU about the way we've responded to COVID-19 and your experience this spring?

Response: open-ended

GENDER: What is your gender?

Man

Woman

Non-binary, please specify: _____

CITIZENSHIP: What is your citizenship status?

U.S. citizen

U.S. permanent resident but not a U.S. citizen

Not a U.S. citizen or permanent resident

HISPANIC: Are you Hispanic or Latino/a?

Yes

No

RACE: Please indicate the race or races with which you identify. (Choose one or more)

American Indian or Alaska Native Asian

Black or African American

Native Hawaiian or Pacific Islander

White

HONORS: Please check all the group affiliations that apply to you:

Planning to graduate with Honors College Distinction

TRiO participant

Student with a Disability

International Student

Student Athlete

First Generation College Student

Enrolled in School of American & Global Studies

Prefer not to answer

Appendix B. Comparison of students who self-reported as 1) not struggling academically before and after the transition to online classes (n=123) and 2) not struggling academically before the transition to online classes but struggling academically after (n=99).

Question:	Not Struggling ¹	Struggling After COVID-19 ¹	t-test	p ²
Overall, faculty at SDSU have shown care and concern for me as they make changes in their courses in response to COVID-19. ³	4.17	3.69	4.12	< 0.0001 ⁺
How satisfied are you with the support you are getting from SDSU to help you transition to taking your classes online? ⁴	3.88	3.22	5.75	< 0.0001 ⁺
How often do you worry about paying your bills? ⁵	2.11	3.04	5.44	< 0.0001 ⁺
Participate in live/synchronous class activities due to other obligations. ⁵	1.97	2.83	5.48	< 0.0001 ⁺
Having the right technology to complete assigned work. ⁵	1.51	1.80	2.21	0.0284
Sharing device with others in household. ⁵	1.36	1.70	2.60	0.0103
How often do you worry about having course content and materials provided in a disability accessible format? ⁵	1.46	1.95	3.23	0.0015
D2L/Zoom/Other learning website not working properly. ⁵	1.85	2.12	2.87	0.0045
Overall, staff and administration at SDSU have shown care and concern for me as they respond to the spread of COVID-19. ³	4.30	3.93	3.47	0.0006 ⁺
Do you feel that your current level of connection is appropriate for the circumstances? ⁶	1.09	1.24	2.84	0.0052
Do you have reliable internet access during regular work hours? ⁷	1.41	1.65	2.59	0.0104
How satisfied are you with the communication you are getting from SDSU about its ongoing responses to COVID-19? ⁴	4.11	3.73	3.28	0.0013 ⁺
How the COVID-19 crisis impacted time spent studying for courses. ⁸	1.85	1.60	2.08	0.0388
I know people who I may contact if I have questions about how COVID-19	3.85	3.54	2.40	0.0175

related changes at SDSU will affect my educational plans. ³				
How often do you worry about accessing and successfully using the technology needed for your online classes? ⁵	1.96	2.60	4.21	< 0.0001 [†]
How often do you worry about having a safe and secure place to sleep every night? ⁵	1.27	1.65	2.45	0.0154
How often do you worry about having enough to eat day-to-day? ⁵	1.33	1.77	2.86	0.0048
How comfortable are you with using Zoom as part of your learning experience? ⁹	3.88	3.30	4.10	< 0.0001 [†]
How satisfied are you with the information you are getting about how changes at SDSU in response to COVID-19 will impact your ability to pay for college? ⁴	3.65	3.09	3.97	0.0001 [†]
Ability to scan or print necessary course materials. ⁵	1.86	2.67	4.46	< 0.0001 [†]
How often do you worry about doing well in college now that many or all of your classes are online? ⁵	2.54	3.99	11.83	< 0.0001 [†]
How often do you worry about losing friendships or social connections now that many or all of your classes are online? ⁵	2.78	3.26	2.95	0.0035
How often do you worry about having access to healthcare? ⁵	1.46	2.21	4.76	< 0.0001 [†]
Are smaller, upper-level classes more challenging face-to-face or online? ¹⁰	2.34	2.53	2.19	0.0294

¹ “Not Struggling” was defined as students who reported not struggling academically before or after transition to online classes and “Struggling After COVID-19” was defined as students who reported only struggling after the transition to online classes.

² Only responses exceeding nominal significance level of $P < 0.05$ reported; [†] = Bonferroni $P < 0.0014$ ($n=37$).

³ Responses coded as 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

⁴ Responses coded as 1 = very dissatisfied, 2 = not satisfied, 3 = neutral, 4 = satisfied, and 5 = very satisfied.

⁵ Responses coded as 1 = never, 2 = once in a while, 3 = about half the time, 4 = most of the time, and 5 = always.

⁶ Responses coded as 1 = yes, 2 = no.

⁷ Responses coded as 1 = good access, 2 = somewhat limited access, 3 = only through my phone, 4 = no access.

⁸ Responses coded as 1 = less time, 2 = same amount of time, and 3 = more time.

⁹ Responses coded as 1 = very uncomfortable, 2 = uncomfortable, 3 = neutral, 4 = comfortable, and 5 = very comfortable.

¹⁰ Responses coded as 1 = more challenging face-to-face, 2 = equally challenging in either format, and 3 = more challenging online.



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Note

Honors International Faculty Learning Online (HIFLO 2020): A model for honors online professional development

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1. Introduction

The Spring of 2020 brought many disruptions to our professional and personal lives due to the COVID-19 pandemic that forced worldwide mid-semester campus closures; pivoting of traditional, face-to-face classes to remote teaching and learning; and postponements or cancellations of conferences, workshops, and other professional development events. One example of the breakdown of scheduled opportunities for us as honors colleagues to gather in-person to enhance our practices and strengthen our community was the cancellation of the 2020 International Conference on Talent Development and Honors Education in Groningen, the Netherlands, originally slated for June 10-12 but moved to June 16-18, 2021.

Immediately following the 2020 conference, we (the authors) had planned to offer the fifth Honors International Faculty Institute (HIFI), an international and highly interactive occasion for honors and talent development teachers, researchers, and leaders to engage in presentations, experiential activities, place-as-text explorations, collaborative group work, reflective exercises, and showcases designed to improve teaching, learning, and programming in honors. Suddenly, the coronavirus upended our world, and we had to reimagine the institute that we had previously organized four times alternately at Hanze University of Applied Sciences (Netherlands) and Texas Christian University (USA).

Putting aside the disappointment of the moment and recognizing the value of coming up with an alternative to HIFI that would ensure the safety and health of our honors colleagues, we decided to create a fully online version with free registration to encourage participation and create resources accessible to all members of our international community. We wanted to highlight the challenges of how all of us unexpectedly had to pivot to remote teaching and learning as the global pandemic intensified, but we also wanted to share information, experiences, and models that could open new avenues for operationalizing online honors education more generally beyond the COVID-19 crisis. We wanted, in other words, to explore how honors pedagogy could (and maybe should) be adapted to the increasingly online world of primary, secondary, and higher education. Thus, HIFLO 2020 was born! HIFLO stands for Honours International Faculty Learning Online.

2. Methods

Our planning included the idea of offering two seminars grounded in honors pedagogy research (for example: Castejón, Miñano & González, 2016; English 2016; Heijne-Penninga & Wolfensberger, 2018; Mihelich, Storrs, & Pellett, 2007; Millward, Wardman, & Rubi-Davies, 2016; Scager, Akkerman, Pilot & Wubbels, 2017; Schutte, 2017; Wolfensberger, 2012). Both seminars aimed to be very interactive and thus limited to twenty-five participants each to allow for dynamic group work, online chat room discussions, and showcasing of work.

The seminars focused on two distinctive topics: “Creating Community—Experiences from Honors” and “Remote Honors—Teaching for Deep Virtual Learning.” We chose those themes because both are important in honors and difficult to realize, especially during online educational interactions. Both subjects are part of the signature honors pedagogy developed by Wolfensberger (2012), with the three pillars of “creating a committed community,” “enhancing academic competence,” and “offering bounded freedom.” In the weeks after school closures because of the COVID-19 concerns, both topics were often mentioned in articles, Twitter messages, preliminary research results, and journalism reporting on the difficulties of teaching caused by the need for emergency remote instruction.

Despite the authors’ experiences with online education for years (Ding & Wolfensberger, 2015; Jones & Leverenz, 2017; Massetti & Lobert-Jones, 1998; Zubizarreta, 2020a), we nevertheless also encountered educational challenges caused by the COVID-19 disruptions (see, for example, Wolfensberger & Vroom, 2020, in this issue). As chair of the National Collegiate Honors Council’s (NCHC) professional development committee, Professor Jones learned how disruptive the COVID-19 pandemic could be as many colleagues clamored for useful toolkits to help them transition to remote instruction; Wolfensberger headed a research team on the educational effects of COVID-19 within Hanze UAS; and Zubizarreta collected new experiences while chairing NCHC webinars on the topic of honors during COVID-19 and participating in online forum discussions with NCHC members (Zubizarreta, 2020b). During all those experiences, various important themes and questions were discussed, and the authors made a list of possible topics for the HIFLO seminars, selecting “Creating Community” and “Deep Learning” for the first sessions.

We used the Zoom platform, enabling us to see all our participants to help preserve a sense of community, use the breakout room feature for small-group work, interact through the chat function, display shared screens of presentation slides, view selected videos, and

generate written ideas on whiteboards. One of our main objectives was to make sure participants recognized that we were not only delivering information and asking them to collaborate and present as a faculty learning community but also modeling for them the strategies and tools that we proposed as viable approaches to online honors pedagogy. Thus, we did not simply suggest the use of virtual tools for building community, developing online discussion forums, taking advantage of small-group work, tapping the power of reflection, and showcasing their learning: we actively engaged our colleagues in using the tools and practicing celebrated pedagogies of honors education in an online environment.

3. Results

HIFLO was an online opportunity for international honors educators to learn, collaborate, and exchange ideas, resources, and experiences related to remote teaching and learning. Fifty-two faculty members from 46 higher education institutions on three continents participated in the two HIFLO sessions.

Registration opened 10 days before the start of HIFLO and was closed after a week because of over-subscription. The HIFLO events were offered 17 and 22 June 2020 in the afternoon Greenwich Mean Time. Every session took 1.5 hours.

After both HIFLO events, we made the live online seminars available as public video files to all participants as well as to those who were not able to share in the real-time experiences because of limited enrollment to ensure adequate time for interactive engagement. The videos are available here:

Creating Online Community: Experiences from Honors

<https://youtu.be/ikpbSrVUZnA>.

Remote Honors: Teaching for Deep Virtual Learning

<https://youtu.be/MI40cuh-ZxM>.

We also put supplementary materials—such as the presentation slide decks, handouts, selected articles, sample assignments, lists of reading resources and web sites, and more—in an open, editable Google Drive folder so that our colleagues can benefit from sharing additional tips and insights that they are free to add to the documents. The link to the Google Drive folder can be found in the videos.

Was HIFLO 2020 successful? We will let some of the participants' feedback speak for itself:

- I enjoyed building community with you today.
- Thank you SO much for the HIFLO events you organized so brilliantly! Indeed, I may say that I have learnt a lot of new teaching and learning methods. And, most importantly, HIFLO meetings contributed to creating new ties in our honors community, thus making it stronger. Thank you very much again!
- Thank you so much for all the time and effort you put into that learning experience for us. It was great to be connected. That was great. I'm going to run with the idea our group had – I'm energized about it! I'll keep you posted!

- Thank you for a very engaging and stimulating conversation today. It was so nice to think about pedagogy when not in the middle of the semester. I found it quite liberating and I felt more willing to experiment with more distance between me and the classroom, which I had not expected. I hope the summer faculty institute can resume in person next summer and that I can be part of it one of these years!
- Thank you for generously sharing your expertise, experience, and resources!
- Wonderful to learn from and with everyone today!

In addition to such feedback, we distributed post-seminar surveys to gather useful suggestions for improving future virtual professional development opportunities.

4. Discussion

The challenges we encountered organizing and delivering HIFLO were probably no different than those encountered by all of us faced with the sudden disruptions caused by the COVID-19 pandemic, necessitating a shift to remote teaching and learning. For some faculty unfamiliar with or resistant to online instruction, the shift required seismic changes to how we traditionally have created community, prepared for and managed our classes, assessed student learning, and other dimensions of our work. To be sure, we learned some important lessons in providing an online professional development opportunity for an international audience of honors educators. The first seven points are about the preparation of the online professional development sessions.

1. Consider carefully the issue of different time zones. We selected an hour that we felt was the best compromise possible, given that our participants spanned seventeen time zones. For example, one of our participants logged in at 4 a.m. her time, while another logged in at 9 p.m., a considerable challenge for both.
2. Another lesson related to time is that, despite our meticulous planning for a 1.5 hour session, with many concessions to give up content we felt was important, we still wished we had more time to allow for more open discussion and more attention to group work and reflection. “Had we but world enough and time,” laments the English poet Andrew Marvell in a different context, but the sentiment rings true when planning for a fast-paced, dynamic event such as HIFLO. There’s never enough time.
3. It took time for the authors/facilitator to reach for a shared vision concerning our HIFLO online sessions. For instance, we had several conversations about whether to livestream the HIFLO events or not. Although serving all subscribers is appealing, the teaching and learning dynamics of a livestream event versus a “closed seminar” are markedly different. We decided not to livestream but to make both HIFLO seminars public afterward on YouTube. Such a decision has consequences for the organization and delivery of the seminar; for instance, we were unable to record all the different Zoom breakout sessions, so they are not available on the video, even though we wanted to share the full experience of the seminar with the YouTube viewers.
4. Preparing two HIFLO seminars of 1.5 hours each took us at least three fairly busy days for each session, not to mention the time each of us spent preparing and revising our plans before and after our virtual meetings. Such intensive investment of time mirrors many teachers’ experience that teaching and learning online require

considerable amounts of time; some teachers may even say that the safety measures prompted by COVID-19 and the connected call for online teaching doubled their working time.

Practicing the various activities we had scheduled was also crucial, alerting us to technical glitches, delays, and other problems we could troubleshoot before the live sessions. Such trial runs allowed us to make changes in our plans for maximum success.

5. We used the Zoom platform for the virtual meeting, but not all participants were familiar with the technology. Sharing clear instructions on whatever virtual meeting system is used is essential for a seamless, successful seminar. We developed our own brief instructional document, but we also pointed our members to a useful and thorough primer available from the Harvard Business School (<https://s3.amazonaws.com/he-product-images/docs/Best+Practices+for+Teaching+Virtually+on+Zoom+v+2.0.pdf>).
6. In addition to sharing guidelines for using the selected virtual meeting platform, advanced notice of the various online tools to be used during the seminar helps participants be ready for the various assignments and activities. We deliberately engaged our members in using Zoom's chat functions, whiteboard, and breakout rooms, but we added other tools such as Slack and Mentimeter to model how they can be used to enhance online teaching and learning. We wanted participants to know ahead of time what applications to download and how to simultaneously use one's laptop and smartphone to enable multiple screen tasks.
7. Participants were asked to prepare themselves for the sessions by watching three short movie-clips that were co-created in a European partnership. Nine organizations committed to talent development in higher education created an e-library filled with tools and movies that can help teachers to spot and stimulate student talent. The movies are organized into the three pillars of honors pedagogy: creating community, enhancing academic competence, and offering bounded freedom (Wolfensberger, 2012). All movies are available online at <https://www.cotalent.eu>. This kind of easy homework appeared manageable for most participants. Watching the movies created a shared experience and knowledge base at the start of each seminar, which helped to open up fruitful conversations. We also offered a reading list consisting of only open-access literature.
8. We insisted on making the seminars as interactive as possible with the use of chat functions and breakout rooms for discussion. Our plan worked quite well, but it was difficult to keep up with the chat posts while trying to keep the pace of the live presentation. Also, the breakout rooms were a highlight of both events—generating many practical ideas, strengthening community, creating a genuine environment of collaborative learning, and in one session producing inspiring showcased outcomes. But transitioning from the full group in the central meeting “room” to the various groups was tricky and took more time than anticipated. Having an expert with technological skills on our team of presenters was an invaluable asset.

9. Given the work involved in both seminars—taxing participants’ attention, interest, and stamina—we incorporated some physical and mindful activities midway through the seminars. The purpose of such interludes was to remind our colleagues that both community and deep learning are enhanced through kinesthetic exercise and restful moments for calm reflection. Judging from the many relaxed smiles during the activities, we believe our lesson was successful. However, looking back, we think that some extra time to invite participants to take a short break—for instance, to drink some water—would have been an additional good idea.
10. Since the focus of our first seminar was on the value of community, a feature of honors pedagogy that also played a role in the deep-learning topic of our second seminar, we politely asked all members to enable their device’s camera so that all our participants could enjoy seeing each other and benefit from connecting a name and a face, a not-so-small encouragement to maintain relationships after the seminar perhaps at future honors conferences. Instead of lingering on a dominant slide on the screen, we would quickly switch to viewing all our participants to continue fostering a sense of community, even if only virtual.
11. A final lesson that is supremely important is making sure to incorporate opportunities for critical reflection, allowing participants to think about not just what they have learned in the seminar but how and why they will synthesize and apply new ideas, strategies, and tools to enhance honors teaching and learning, whether in face-to-face, real-time interactions or online. We encouraged such reflection in both sessions through the use of the available chat, breakout rooms, polling, whiteboard, mentimeter, and open discussion functions in the Zoom platform, inviting our members to think, write, and share as they reflected on the various topics we discussed in real time. After the seminars, we urged participants to join Slack and contribute to the Google Drive folder as a way of sustaining our reflective and collaborative faculty learning community. As presenters, we, too, engaged in critical reflection after each seminar to share what we learned from the experience and how to improve our work.

5. Conclusions

By reporting on the process of creating our Honors International Faculty Learning Online (HIFLO), we aim to inspire others to engage in similar endeavors. We hope that we will be able to enjoy a safer and healthier world in the coming months, enabling us to reprise the very successful personal opportunity of our Honors International Faculty Institute (HIFI) events. We are looking forward to following the projected 2021 conference in Groningen with a fifth exciting HIFI, and we would be very pleased to welcome an enthusiastic, creative small group of dedicated honors friends to our next occasion to learn together. But if circumstances prevent our meeting, perhaps HIFLO will reappear to help us sustain our valued community and keep us teaching and learning for excellence, whether personally or virtually.

Acknowledgments

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References

- Castejón, J. L., Miñano, P., & González, M. (2016). Latent class cluster analysis in exploring different profiles of gifted and talented students. *Learning and individual differences*, 50, 166-174. <https://doi.org/10.1016/j.lindif.2016.08.003>
- Ding, N., Wei, J. Q. & Wolfensberger, M. (2015). Using epistemic synchronization index (ESI) to measure students' knowledge elaboration process in CSCL. *Computers & Education*, 80, 122-131. <https://doi.org/10.1016/j.compedu.2014.08.004>
- English, J. A. (2016). A digital literacy initiative in honors: Perceptions of students and instructors about its impact on learning and pedagogy. *Journal of the National Collegiate Honors Council*, 17(2), 125-155. <https://digitalcommons.unl.edu/nhcjournal/533>
- Heijne-Penninga, M., Wolfensberger, M. V. C. (2018). "Creating community" as a teaching strategy for honors students. *Journal of the European Honors Council* 2(1), 6. <https://doi.org/10.31378/jehc.8>
- Jones, B., & Leverenz, C. (2017). Building personal brands with digital storytelling ePortfolios. *International Journal of ePortfolio*, 7(1), 67-91. https://www.researchgate.net/publication/319650774_Building_Personal_Brands_with_Digital_Storytelling_ePortfolios
- Masseti, B. & Lobert-Jones, B. M. (1998). The internet as a tool for supporting international teams in the classroom. *Journal of Computer Information Systems*, 38(2), 68-75. <https://www.tandfonline.com/doi/abs/10.1080/08874417.1998.11647329>
- Mihelich, J., Storrs, D., & Pellett, P. (2007). Transformational experience through liberation pedagogy: A critical look at honors education. *Journal of the National Collegiate Honors Council*, 8(2), 97-115. <https://digitalcommons.unl.edu/nhcjournal/45>
- Millward, P., Wardman, J., & Rubi-Davies, C. (2016). Becoming and being a talented undergraduate student. *Higher Education Research & Development*, 35(6), 1242-1255. <https://doi.org/10.1080/07294360.2016.1144569>
- Scager, K., Akkerman, S. F., Pilot, A., & Wubbels, T. (2017). Teacher dilemmas in challenging students in higher education. *Teaching in Higher Education*, 22(3), 318-335. <https://doi.org/10.1080/13562517.2016.1248392>
- Schutte, I. (2017). *Ethical sensitivity and developing global civic engagement in undergraduate honors students*. Thesis. Ipskamp Printing. <http://hdl.handle.net/11439/3095>

Wolfensberger, M.V.C. (2012). *Teaching for excellence: Honors pedagogies revealed*. Thesis. Münster, Germany: Waxmann.

Wolfensberger, M., Vroom, M. (2020). Creating community during the COVID-19 pandemic: Honors makes a case online. *Journal of European Honors Council*, 4(1), 8.
<https://doi.org/10.31378/jehc.133>

Zubizarreta, J. (2020a). Using the online forum for honors learning. *Honors in Practice*, 16, 216-218. <https://digitalcommons.unl.edu/nchchip/327/>

Zubizarreta, J. (2020b). Honors in the time of Corona. *Journal of European Honors Council*, 4(1), 7. <https://doi.org/10.31378/jehc.139>

Note

Remote teaching transition during COVID-19 – the first five weeks and the start of a digital knowledge-building community

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1. Introduction

The COVID-19 pandemic forces millions of teachers worldwide to engage in online teaching. Teachers are exploring and experimenting with various digital forms to deliver learning content, keep communicating with students and colleagues, and assess learning outcomes. A digital knowledge-building community gradually emerges and becomes more vivid. This note reports results from a study among honors teachers and administrators from 18 schools of a large Dutch university who all shared their problems and recommendations after the first five weeks of remote teaching, Spring 2020.

To understand the context of the study, we explain the measures taken in Dutch higher education because of the COVID-19 pandemic. We then turn to the concept of the knowledge-building community, zoom into the community aspect of this knowledge-building community, and reflect on the specific role of honors programs. Then, we report on the data collection and preliminary results of the study. Finally, we share conclusions and suggestions for further research.

2. Measures in Dutch higher education because of the COVID-19 pandemic (March-May 2020)

On Thursday March 12, 2020, the Dutch cabinet decided that, due to the COVID-19 pandemic, university buildings would no longer be open for teaching purposes. For Hanze University of Applied Sciences (UAS) Groningen, this meant that as of Friday March 13 and at

least until March 31, all physical lectures and exams were suspended. This was immediately followed by the investigation of possibilities to offer lectures online so students would experience as little study delay as possible.

Uncertainty about teaching remained as the measures taken were extended and became more strict multiple times throughout the semester. During the first weeks, the prospects of offline education changed almost every other day. Eventually, universities of applied sciences decided to refrain from any physical teaching activities until June 1. By May 8, Hanze UAS decided to continue offering online education until the summer holidays. The government indicated that working from home remained the norm, so this also applied to all employees of Hanze UAS.

Data for this study were collected at the end of April, during the first period of the measures taken to slow down the spread of COVID-19. This stage included the rapid change to remote teaching, a period of uncertainty about how long online teaching would be necessary and whether all classes and exams would be online.

3. Knowledge-building community

The sharp turn to online teaching caused by the COVID-19 pandemic implies that knowledge-building is also digitalized. Knowledge-building emphasizes the key role of social interaction. The notion of knowledge-building is rooted in the Vygotskian view of educational dialogue (Vygotsky, 1978). From Vygotsky's sociocultural approach to learning, knowledge is socially constructed through language, and therefore educational dialogue is pivotal for knowledge-building.

Scardamalia and Bereiter (2003) define knowledge-building as "the production and continual improvement of ideas of value to a community, through means that increase the likelihood that what the community accomplishes will be greater than the sum of individual contributions and part of broader cultural efforts" (p. 1371). This definition implies that we advance our knowledge also using each other's ideas through educational dialogue within the community or with other communities.

In a university setting, the classroom is a small knowledge-building community. Classrooms create settings of knowledge-building where, ideally, students and teachers jointly develop their knowledge. Teachers have multiple classes and students engage in different class communities. Honors colleges and programs also offer seminars, classes, labs, and workshops which are all in themselves small knowledge-building communities.

A school community consists of a multitude of class communities. For example, Hanze UAS has 18 schools and seven multidisciplinary knowledge research centers. They are all knowledge-building communities. These communities generate knowledge jointly through within- and between-school interaction. Hanze UAS gives back to entrepreneurs and society through sharing innovative knowledge or knowledge advancement.

4. The community aspect of a digital knowledge-building community

The COVID-19 crisis created an unforeseen new landscape for teaching and learning with everybody involved in working at home. The sudden digitalization of our knowledge-building

communities requires us to reshape our vision of education, community and networking aspects in particular, and think of future developments. A “new normal” will arise because of COVID-19 measures with social distancing, more online teaching, and more online meetings.

The community aspect of digital knowledge-building is a new challenge for us all, as we used to focus on the supplementary role of online learning. While there is increasing research on MOOCs (Massive Open Online Courses, see Liyanagunawardena, Adams, & Williams, 2013), investigations about other completely digitalized knowledge-building communities are rare.

In a digital community, the traditional educational dialogue changes its form. For instance, teacher-student communication is mediated via online tools. Moreover, students suffer from pressure related to online learning. Previous peer groups such as their project team, classes, and clubs no longer meet face-to-face. They “meet” their classmates mostly as names on the attendance list in the virtual classroom. Some digital project teams are viable and ongoing; however, due to the lack of face-to-face social communication, students’ learning motivation might be hindered.

Amid every crisis lie great opportunities. Facing some common problems, teachers and schools from different fields can be pulled together to solve problems collectively. In a digital community, communication and knowledge sharing can be carried out in multiple formats.

5. The position of honors programs in digital knowledge-building communities

An honors program as a knowledge-building community has its advantages over other knowledge-building communities, because of three reasons, as follows:

1. Often, honors consists of interdisciplinary teaching and learning and talent development projects from different schools. An honors program can work as a facilitator to pull all schools and knowledge centers together.
2. The role model effect of honors students can impact regular students to adapt themselves to online learning more effectively. They will show other students “how to learn.”
3. Teacher-researchers in honors programs often had specific training and may have gotten insights into unique features of subject-related specializations in online teaching.

In this study, we were interested in how teaching and learning changed because of the required emergency remote teaching and what can be learnt from the experience to develop our knowledge-building community. Below, we share the preliminary results of our research completed after the first five weeks of the pandemic, in which the focus was on lessons learned and urgent problems to be solved.

6. Data collection

This study reports on teachers’ and administrators’ perceptions about their first five weeks of remote teaching during the COVID-19 pandemic. Since the measures were introduced quickly (see section 2), we wanted information at the start of the remote teaching period as perceptions may change over time. This study is part of a larger research project following the effects of the measures taken to slow down the COVID-19 pandemic on teaching and learning in higher education.

Our data collection started by sending out an e-mail with questions on April 20, 2020. One reminder was sent out four days later. Most people answered our questions by email, but some preferred to talk. One of the authors called the respondents personally using the phone or Facetime/ Skype and made minutes of the conversations which were then checked by the respondent.

We asked deans, honors coordinators, and teachers five questions. Two of those questions focused on teaching:

1. After these first weeks of organizing education completely online, do you have tips that you would like to share with others so they can improve their education?
2. After these first weeks of organizing education completely online, what are the problems you would like to solve?

Additionally, we asked two questions concerning assessment, exams, and assignments. Those questions are beyond the scope of this article. The fifth question was open and allowed respondents to share experiences in general about the period with only online teaching.

We received data from 17 out of 18 schools. In total, 33 people responded. Responses were analyzed independently by the two authors and an assistant. All three used content analysis and summarized the responses. We discussed our findings and summarized them in a poster, which can be found as supplementary file to this article. We discussed the poster with respondents. We also talked about the findings with respondents and researchers of the Research Center “Talent Development in Higher Education and Society” at Hanze UAS to reach agreement on the analysis and structure of reporting.

The initial findings of the first research stage are presented in the next section. First, there is a general overview, followed by challenges and recommendations, all distilled from the responses.

In the responses, differences between teaching and learning in honors and regular education are vague – although examples of how things work well were mostly picked from honors classes.

7. Results

7.1. General picture

The general picture of the move from face-to-face education to remote teaching at Hanze UAS is positive. The most urgent problems that arose from emergency remote teaching were solved through collective efforts. Teachers were positive about digital assistance provided by Hanze UAS, calling it prompt and helpful. The main difficulties found related to technical problems students faced at home. However, some teachers faced challenges and needed to be supported and facilitated as well.

All kinds of digital tools were used – including Teams, Zoom, and Skype. The most frequently used tool was Blackboard Collaborate Ultra, which Hanze UAS provided. Teachers indicated

that they received too many lists with tips or requests. They needed more personalized assistance – adapted to their individual questions.

Schools worked hard to offer all education responsibly and interestingly, to keep in touch with students, and to prevent study delays. Teachers and administrators seemed satisfied and proud overall. They created networks and helped each other. Knowledge networks have developed within the schools and between the schools. Deans shared evaluations and PowerPoint presentations with tips. The shared experiences gave inspiration. They thought that most students were reached and that most students could follow their courses. Although there were various problems with specific courses such as labs, internships, and competencies classes, the overall first experiences were positive. Teachers indicated that maybe even more students were in classes than in times of face-to-face education because online learning seemed less difficult to join and there was less shaming when a student was late.

It appeared that more was possible than expected. One of the teachers said: “If you had asked me in advance if I could give all honors education online, I would have said ‘no’ - precisely because of the personal honors character. And now, after a few weeks online, things are going very well, perhaps because honors education is focused on flexibility, creativity, and proactivity.”

7.2. Challenges

In this section we present an overview of the experiences as time progressed, as well as five challenges, distilled from the responses.

As time progressed during the first five weeks of the crisis, the disadvantages of remote teaching became more apparent: the lack of personal interaction during classes, the lack of a sense of community, and a lack of chemistry in the classroom. Initially, a crisis has occurred, and teachers and administrators needed time and help for thoughtful educational changes, innovations, and course design changes, while fatigue was also increasing.

Although nobody initially signed up for online courses, all parties involved had to do so, and some teachers could not make the switch to online. Some even questioned their professional identity. From one day to the next, teachers received an infinite amount of extra work in addition to the regular work. In their formal workload, most teachers have about 30 minutes to prepare for a one hour class – this was not enough time when everything, including assessments, had to be changed to accommodate remote teaching.

Administrators and teachers felt proud of their accomplishments since the start of the crisis. However, they expressed it was difficult to create and digitally maintain the sense of community. Administrators mentioned a wish to face the crisis professionally and to accomplish tasks. They shared new knowledge and successes but felt hesitant to share difficulties and struggles with their peers.

Teachers expressed that the lack of personal contact proved challenging. They invested in this personal contact with students in various ways, and they indicated this contact was important. However, the time investment to build personal relationships online was huge.

Also, teaching large groups without real interaction proved doable, but tiring and less satisfactory.

Five challenges were distilled from the interviews after the first five weeks of online education:

1. **New pedagogy needed**
Online education and the crisis asked for “new” and different didactics, but time and skills to get acquainted with those were lacking. Interaction during classes proved difficult and teachers expressed the feeling of one-sided knowledge transfer. Deep learning, skills, and competencies such as presenting, debating, and interviewing were hard to achieve. As face-to-face encounters were not possible, it appeared difficult to connect, to ask a small question, and to feel the chemistry in your class. Personal contact or differentiation were limited .
2. **Labs on hold**
Some types of education asked for new solutions – and emergency remote education solutions did not always give enough satisfaction. Especially classes like lab work, competencies and skills training, medical classes, internships, and encounters with employees were difficult to replace. It was difficult to meet new people or to create new interdisciplinary classes.
3. **Technical issues**
There were all kinds of technical problems for both students and teachers. Also, Wi-Fi connections were often unstable, which disturbed the flow during meetings or classes. Worries about privacy issues were mentioned as well, for instance, concerning the use of Zoom.
4. **Lack of connection**
The feeling of connection and community was lacking during classes, for instance, because cameras were off. It was difficult to organize contact with and between students because of technical issues, bad internet, or “hiding.” Also, making connections within schools and between schools asked for new solutions.
5. **Workload**
The workload became huge. Both teachers and administrators had changes in the content, amount, organization, and rhythm of their work. The workload may be perceived as extra heavy because everyone had to work from home. Not all could manage the change, which increased the workload for others. A need to create an individual and shared vision on the change in the near future was expressed, but time and skills to do so were lacking.

7.3. Recommendations

Teachers and administrators shared tips after the first weeks of COVID-19 measures for online education. We distilled five overall recommendations.

1. **Redesign**
Online education should be organized differently compared to education on campus. Also, different pedagogy is needed. One could think of smaller groups and online platforms to create community. Online classes, lectures, presentations, and meetings should be shorter, as they are perceived as more intensive. The experience of social cohesion and community is important and asks for new “antennas” and different skills. Honors courses can showcase how to co-create online education in small teams of teachers together with honors students. Also, interdisciplinary honors courses could be an example. Furthermore, a buddy system for teachers who experience difficulties with online education could be powerful. Finally, personalized faculty development could be a solution.
2. **New sense of community**
Pay attention to each student, if possible, individually, by creating special community moments. Do ask direct questions and ask about emotions, feelings, and experiences. Sometimes it seems easier to share personal stories or talk about (new) hobbies. Use small group coaching more frequently. Co-create courses with students. There is a risk of students dropping out, so dare to experiment in order to increase community engaged learning. Informal contact may strengthen community relationships. Student associations, mentors, or honors alumni are asked to help to increase social cohesion. Small groups are advocated. In online classes, you may consider asking students to put on their cameras and microphones. All parties’ personal lives can be more present when you see each other’s home situation. However, for some this can be a problem, as for students from lower socio-economic backgrounds. A way to address this challenge is to survey the students at the beginning of the course and see if they have any issues putting the camera on.
3. **Networks**
Enable networking. Teachers are also learning by doing. Through collaboration, new knowledge-building networks emerged, which are small, need-driven, spontaneously set up, and open. The networks are within schools and between schools. Teachers were satisfied with those self-created networks. The way they talked about those networks echoed ways knowledge-building communities are created – only now, everything happened online. Also, students can be part of those networks.
4. **Structure and variety**
Students benefit from structure. For instance, you can start the day together. Also, variety is important and a good balance between “sending information” and “interaction.” For instance, let students prepare learning content together and use various ways to show knowledge. Provide flexibility in teaching and learning and adjust content echoing the current crisis, though learning outcomes remain unchanged.

5. Communication

Clear and direct communication is crucial – between all parties involved. Provide “subtitles” during online classes to clarify emotions. Utilize personalized communication to improve student well-being and motivation. It may be helpful to facilitate sessions where students can meet each other independently without a teacher, like, for example, on Blackboard Collaborate. Some teachers started WhatsApp groups that focused on the community and wellbeing of all members. Also, communication between teachers is important, for example, to share tips and experiences. Weekly updates or online meetings can also be useful.

8. Conclusion

The COVID-19 pandemic caused the cancellation of all face-to-face education at Dutch universities by mid-March 2020. This study reported on experiences of teachers and administrators after the first five weeks of remote teaching and working from home.

Teachers and administrators indicated that online education is not merely moving education online. They discovered that online education provides flexibility and offers more opportunities than they thought beforehand. However, teachers missed the chemistry in class and experienced a lack of communication. They indicated that honors courses can function as an educational laboratory.

The university community had to look for new ways to improve personalized contact and interaction while face-to-face meetings were not allowed. Amidst the crisis, people helped each other and networks arose, creating digital knowledge-building communities. A next step is needed to stimulate networks aimed at strengthening the community and deepening knowledge about online teaching and pedagogies that teachers currently lack.

Teachers had to deal with a heavy workload and pressure as the quality of education must be guaranteed, even now that universities are choosing a different approach. Time was needed to recreate their courses, to re-design instructions in innovative and research-based or -informed ways, and to devise new learning environments.

The challenges and recommendations mentioned above were shared after only five weeks of remote emergency teaching. With more time, often more wisdom follows. Other potential approaches are possible than what the teachers have recommended to resolve the presented challenges. As time progresses, and the crisis continues, additional questions may be asked, for instance, about community engaged learning in a blended learning environment, new digital pedagogies for hybrid classes, and about equal opportunities and access. Furthermore, findings may have a national bias. For instance, the impact of the COVID-19-related measures on the international student body was hardly mentioned by the respondents. Also, the use of cameras and audio during classes may be interpreted differently by various nationalities or socio-economic backgrounds.

By May 2020, initial positive feelings of ‘dealing with the crisis together’ faded to the background, and the university community entered a new phase. Step by step, people realized that the changes and the “new situation” caused by the COVID-19 pandemic would take longer than expected and that it would be wise to create individual and shared visions

on the “new normal.” Emergency remote teaching had to transform into online education. We recommend follow-up research to map experiences during this transformation.

We propose to take advantage of shared experiences and the community building skills that were used so far. For instance, honors can showcase ways to build an open and dynamic digital knowledge-building community. In the future, when we return to our campus, we hopefully can leverage available technology to achieve effective collaboration between schools.

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References

- Liyanagunawardena, T. R., Adams, A. A., & Williams, S. A. (2013). MOOCs: A systematic study of the published literature 2008-2012. *International Review of Research in Open and Distributed Learning*, 14(3), 202-227.
- Scardamalia, M., & Bereiter, C. (2003). Knowledge-building. In: Guthrie, J. W. (Ed.), *Encyclopedia of Education* (2nd ed., pp. 1370-1373). New York: Macmillan Reference, USA.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Note

Highlights of the 2019 honors session at the International Students' Conference in Siberian Federal University, Russia

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Abstract

In honors education, creating a community of talented and ambitious students is a goal of primary importance. Honors sessions at international conferences contribute to globalization of the honors community and offer opportunities for starting the dialogue between honors students of different universities and diverse academic fields. The current note provides insight into the discussion at the honors session organized by SibFU Honors College at the international students' conference "Prospect Svobodny 2019" at the premises of Siberian Federal University in Krasnoyarsk, Russia. The author describes the results of the interdisciplinary research activities presented at the session by honors students from Texas Christian University, Western Michigan University, University of New Mexico, Lamar University, and Siberian Federal University. The note reveals how the honors students' sessions become forums for reflecting on the value of learner agency and also for exploring the areas of prospective collaboration in interdisciplinary research for honors students worldwide.

Keywords: honors education; honors college; honors students; conference session; learner agency; interdisciplinary research

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1. Introduction

The annual International Conference "Prospect Svobodny" organized by Siberian Federal University, Russia aims at involving gifted students in research and innovative activities and also at intensifying the scholarly endeavors of post-graduate students and young scholars. Upon the launch of the SibFU Honors College, an honors session was integrated into the program of the Conference as one of its special events. The objectives of the honors session include discussing the results of honors students' research activities, identifying the most

promising directions of international interdisciplinary research for honors students, exchange of experiences with and ideas about honors students' best practices in project management, and discussing the directions of developing honors students' personal and professional skills by means of interdisciplinary research. The participants of the honors session were honors students and their research advisors from honors colleges of universities worldwide, honors educators, and scholars whose research is focused on honors students' interdisciplinary studies.

With SibFU Honors College being one of the pioneers of honors education in the Russian Federation (Tarasova, 2019), the results of the discussion that took place at the honors session allowed the college to define the strategies and tactics of applying international educational honors standards to the practices of Russian universities and understanding the overall importance of honors programs for both individual development and personal enhancement of gifted and talented students.

Among the topics suggested for discussion in various presentations are game technologies in honors education and best practices for developing skills of the twenty-first century (for instance, leadership and decision making, critical thinking, skills of effective communication, negotiation skills, creativity, etc.).

2. Honors program at the Siberian Federal University (SibFU)

The mission of SibFU Honors College is to contribute to the development of the creative personalities of students who are ready for an active realization of their own potential. SibFU Honors College was organized for talented students with a high level of academic achievement, for gifted, ambitious individuals, self-motivated and open to new knowledge.

SibFU introduced the honors program to the second- and third-year students who excelled in their studies at the university in 2017. With a total of 25,000 students in the university, the number of high-achieving students invited to enter the honors college is estimated at 2,000. As a result of the enrollment campaign, 110 students joined SibFU Honors College. The program of SibFU Honors College is specifically designed to achieve the goal of developing such competencies as self-learning and self-improvement. The program's objective is also to develop students' soft skills that allow individuals be more effective in collaboration when working on interdisciplinary projects. Honors students of Siberian Federal University may develop communication skills, cooperation, negotiation, leadership, personal agency, critical thinking, creativity, visual thinking, ability to find positive solutions in conflicts, capacity for decision making and project management, etc. The courses comprising the program of SibFU Honors College allow students to achieve the goals of improving these skills (SibFU Honors College Study Guide, 2017).

The Honors College provides an alternative educational mode to students of SibFU. Lack of choice and of academic freedom is typical for higher education institutions in Russia. Undergraduates, graduates, and even postgraduates typically follow the learning paths predetermined and led by instructors. The possibility of choosing own learning areas and an ability to build one's own educational trajectories is new and highly attractive to honors students of SibFU. Each semester, honors students have an opportunity to choose one or two courses that they find useful and important to them. The minimum number of courses

required to complete during two years of studies is four. According to student surveys, the reasons that determined their choice differed. Sixty-one percent selected courses to develop deficient soft skills assessed as essential to have, 23 percent opted for courses that offered “something new” and totally different compared to the materials their regular studies offered, and 16 percent decided on courses identified as resources to deepen knowledge and improve skills in the subject areas in which they were already proficient.

The educational program of SibFU Honors College is methodologically structured according to the principles of developmental learning, liberal education, and educational enthusiasm. The classes at SibFU Honors College are conducted in the format of business games, learning games, organizational activity games, discussions, debates, project making, and various forms of edutainment.

3. Honors session at “Prospect Svobodny 2019”

The title of the conference “Prospect Svobodny” is accurate and symbolic at the same time. The name refers to the exact address of Siberian Federal University that is positioned at the avenue (in Russian, “prospect”) with a name that speaks for itself (in Russian, “svobodny” means “free” or “liberal”). As the conference took place at the “Avenue of Liberty,” the organizers urged young participants to be bold and free in proposing their innovative ideas and ground-breaking research. The content of the honors session met the objectives of the conference, as the presenters attempted to suggest pioneering and original concepts in spheres of honors pedagogy, project management, and interdisciplinary research. The overall goal of the conference was to identify the most promising directions in the research of the undergraduate, graduate, and postgraduate international students. Over 2,000 students presented the results of their research at more than 70 conference sessions. The aim of the honors session was to discuss the directions of developing honors students’ personal and professional skills by means of interdisciplinary research. The participants invited to the honors session included honors students and their research advisors from honors colleges of universities, scholars with their research focused on honors students’ interdisciplinary studies, and honors educators. More than 30 participants (20 students and 12 faculty members) from honors colleges of Russian and U.S. universities shared the results of their research at the honors session of “Prospect Svobodny 2019.” Both on-site, electronic, and off-site formats were suggested for participation. Forms of electronic participation, preferable for presenters from the U.S., included pre-recorded video-presentation and on-line video presentation.

At the honors session, students and faculty were invited to take equal roles of strategists of honors pedagogy. Members of the SibFU Honors College faculty Yulia Varfolomeeva, Arthur Kongarov, and Daria Shtork presented their research, “Partnership as a condition for the formation of initiatives in the learning environment.” The research aimed at examining the conditions for the formation of initiative in the learning environment. The presenters mentioned that the learner is constantly dealing with conflicts that need to be positively and constructively resolved. In the resolution of conflicts, the researchers advised to follow the model of cooperation where the conflict is approached as a meaningful encounter of equal partners, though different in their initial viewpoints. A stimulating and productive educational environment can be organized according to the principles of partnership in relations between teachers and students. Both the teacher and the student in such a

relationship have their own interests and resources. The ultimate objective of their relationship is to find the mode of interaction that satisfies their interests and becomes their mutual resource.

The results of the research prove that individual initiative occurs only in a learning environment that supports contractual relations, in the atmosphere where the action of the teacher is formalized and rationalized but at the same time leaves room for the response of the student. It was suggested that a negotiation process may be applied to setting this kind of relationship – from the registration of interests to the search for mutually beneficial solutions.

The honors session also served as a forum for educational reflection where students could express their views on the basic values of honors education together with members of the honors faculty and administration. SibFU honors student Alina Sosnovskaia spoke about the importance of learner agency. The student assessed personal agency—the capacity of individuals to act independently and to make their own free choices—as the most important skill is that the honors program develops in students. The purpose of the honors program was defined as transforming the student into an active force in the system of education. At the honors session, students spoke about innovations in honors education. SibFU Honors College students Alina Sosnovskaia, Polina Grigorovich, and Anastasia Bugaeva presented their research “Development of leadership competencies of SibFU Honors College students: the project ‘The Territory of Intellectual and Liberal Inventions.’ ” The presentation was awarded with the highest recognition at the honors session. In their presentation, the students pointed out that honors education is focused on the development of leadership competencies of learners who would generate and develop innovative ideas and create teams and communities.

The analysis of the best honors practices in developing leadership (Honors Congress Leadership Conference, 2019) led SibFU students to the understanding that the most promising direction in the study of ways to improve leadership competencies in honors education is the organization of educational events initiated by learners themselves. As the methodology of the SibFU Honors College is based on gaming technology, the key objective of the research was to design a gamification model of a process of development of the students’ leadership competencies and to apply the developed model at the SibFU Honors College. The project “The Territory of Intellectual and Liberal Inventions” contributes to developing and improving honors community, as it promotes collaboration, encourages students’ initiative, and forms personal agency of the SibFU Honors College students through the use of the game approach. The use of gamification makes the process of education more interesting for students. This fact is especially relevant in the context of an educational environment organized from the students’ initiative, where learners determine the course of their own educational process.

The results of the survey undertaken in this project showed that, among the most sought-after leadership competencies in the SibFU Honors College, students indicated stress resistance; an ability to listen to and heed; an ability to organize others; willingness to be responsible for the team and the result even in case of failure; and a learning ability and aspiration for self-improvement. Confidence in decision-making and the ability to organize

others were also identified as priorities for development among students in the SibFU Honors College.

A gamification model of a development process of the honors students leadership competencies was designed according to the approach introduced by Werbach et al. (2012; 2019) in their 'Six steps to effective gamification' design system. The goal of the game was to develop the most relevant leadership competencies of SibFU Honors College students in the context of a self-motivated learning environment through their participation in the preparation, conduct, and reflection on an interactive gaming sessions. The authors of the project termed the desired behavior of the players as "the leader's conduct." The players' initial characteristics included the intention for self-realization capacity for productive cooperation, creativity, and focus on continuous personal and professional self-improvement. The students described four stages of integration of players in the game process: involvement, mastering, assimilation, and self-realization.

The designed gamification model of a development process of the honors students' leadership competencies was tested in SibFU Honors College in April 2019 in a game session format. The honors students' confidence in decision-making and their ability to organize were the skills to be improved in the process of the game. The authors of the game selected the story of space travel for this session. A legend was presented to the participants, suggesting that they travel on a spaceship and interact with many intergalactic races in order to exchange the achievements of society and technology. During the game session, the players were to learn qualities and competencies from each other, to assign roles within the spaceship team, to find out and present the most optimal solution to the proposed tasks and situations, and to analyze the results of game session.

As a result of their presentation, students declared that the analysis of the game's outcomes indicated the possibility to develop honors students' leadership skills with the help of gamification methods. They confirmed that the behavior of the players changed in the process of the game. The changes were caused by taking the leading roles, by practicing various strategies of decision-making within a team, and by active participation in improving their teamwork.

The students concluded that in honors education, which is always focused on the development of leadership competencies, activities that improve such skills would be more beneficial if introduced not by the administration and faculty of the honors colleges but by honors students themselves. Providing students with the opportunity to participate in the creation and realization of educational events aimed at the development of leadership competencies helps to increase their interest in the results of these events.

It is critical for honors education to develop global citizenship values in honors students. International collaboration and teamwork and different kinds of international internship are the key skills of the future (Van Eijl et al., 2017). SibFU honors student Daria Diatlova proposed the idea of the International Honors Internship project designed to meet the needs of the honors students striving to become global citizens and building a career in the international community. The survey showed that more than 60 percent of SibFU Honors College students have insufficient or no experience in communication with people from

other countries, but 57 percent of respondents expressed their interest to work at an international company. The results of the survey also showed that 60 percent of SibFU honors students consider soft skills important for building a career in the 21st century, although more than half of the students consider their soft skills undeveloped, and over 80 percent of them suppose that, depending on the country, the range of soft skills required can differ.

The project of the International Honors Internship program suggested participation of honors students from eight different countries and applying the strategy of experiential education. Studying soft skills in an online course (specifically designed for this program) resulted in using those skills in practice by solving real-life business cases in an international organization. The student proposed the organization could be a member of the international network of business partners engaged in collaboration with honors associations worldwide. Diatlova believed her project to be beneficial for all participants: the honors community, international companies, and society as a whole. The student emphasized that the International Honors Internship program would aim at breaking cultural barriers between honors students of different countries and at practicing their soft skills in real-life business cases. The internship program would also offer opportunities for interdisciplinary research. The project of the International Honors Internship program could help develop honors students' global citizenship values and their skills of intercultural communication.

The honors session created an invaluable opportunity for honors students of different countries and diverse majors to also explore the advantages of interdisciplinary research. The discussion that occurred at the conference provided insights into the research at the intersection of such disciplines as transportation network planning and history of literature; ethics and economics; and real estate management and architecture studies. Honors student of the University of New Mexico Joshua Rysanek spoke about the poetic map of roads and places in the city of Albuquerque. On the map composed from the result of the interdisciplinary research, each transportation landmark was juxtaposed with a milestone in the history of poetry created by various American poets in the city. Honors student of the Neeley School of Business at Texas Christian University Kiana Stephen presented her research on what determines people's moral perceptions and how these perceptions affect their views on self-driving cars' ethical dilemmas using "The Ethical Knob" (Contissa et al., 2017). Finally, SibFU honors student Anastasia Bondareva presented her interdisciplinary research "Architectural visual thinking of the real estate manager," with the purpose to analyze the architectural complex of Siberian Federal University and to identify the importance of visual thinking for managing the University as a real estate object.

4. Conclusions

The goal of the honors session was achieved, as the directions of developing honors students' personal and professional skills by means of interdisciplinary research were discussed in various aspects. The results prove that the global honors community can be strengthened through honors sessions at international student conferences, such as "Prospect Svobodny 2019." The sessions reveal their functions as a forum where students speak about necessary improvements in honors teaching and learning. It is possible to consider honors sessions as meeting points where the dialogue between honors students of different countries is initiated with prospects of subsequent growth into collaborations in

various areas of students' interdisciplinary research and project management. The next annual international conference "Prospect Svobodny" promises to be an event that attracts even more attention of honors faculty and students worldwide.

References

Contissa, G., Lagioia, F., & Sartor, G. (2017). The Ethical Knob: ethically-customisable automated vehicles and the law. *Artificial Intelligence and Law*, 25(3), 365-378.

Honors Congress Leadership Conference. University of Central Florida (2019). Retrieved from <https://events.ucf.edu/event/4105/honors-congress-leadership-conference>

SibFU Honors College Study Guide. Retrieved from <http://www.sfu-kras.ru/en/honors>

Tarasova, M. (2019). The basic trends of honors education in universities worldwide. *Perspectives of Science and Education* 2 (38), 38-47.
<https://psejournal.files.wordpress.com/2019/04/1902pno.pdf>

Van Eijl, P., Peeters, T., Moesker, H., Dillen, A., Pilot, A., Van Ginkel, S. (2017). Honors programs as forerunner for 21st century skills? *Journal of the European Honors Council*, 1 (2), 8. <https://doi.org/10.31378/jehc.25>

Werbach, K. (2019). *Gamification*. Retrieved from:
<https://www.coursera.org/learn/gamification>

Werbach, K., Hunter, D. (2012). For The Win: How Game Thinking Can Revolutionize Your Business. *Wharton Digital Press* (148).

Paper

Relevance and meaningfulness: Student perspectives on the highly talented international business professional profile

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Abstract

Competencies deemed relevant and meaningful by international business professionals and implemented in IB education still do not produce work-ready graduates. This may be because these competencies are not perceived as relevant or meaningful by students. This study was conducted to gain students' perspectives on the relevance and meaningfulness of the HTIBP talent competency framework and how they perceived working with it. Results show that the five competency domains of the HTIBP competency framework are perceived as relevant and meaningful by students, in alignment with the professional field, however, this was not the case for a few associated items (behaviors) like "showing entrepreneurship" and "improving ideas from others." The lack of clarity of these behaviors resulted in less experienced relevance and meaningfulness by students. Our findings will help educators to better facilitate students' understanding the meaning and relevance of competencies. This may help to improve alignment with the professional field.

Keywords: talent competencies; business education; student perception; meaningfulness

1. Introduction

In a changing and globalized environment, undergraduate international business (IB) education faces challenges to prepare students for high levels of performance to meet the

needs of the professional field (Jackson, 2013; Tarique and Schuler, 2010). This is attained by developing competencies and other characteristics needed to function and thrive in employment (De Vos, De Hauw, & Van der Heijden, 2011). In higher education, learning outcomes are therefore often formulated in terms of competencies, a coherent set of knowledge, skills, and abilities (Van Merriënboer et al., 2002). Competencies are presented in frameworks, which are used to design education (Allen, Ramaekers, & van der Velden, 2005; Boyatzis 2008, Chyung, Stepich, & Cox, 2006) aiming to prepare students for their working life and career success (Biemans, Nieuwenhuis, Poell, Mulder, & Wesselink, 2004; Boyatzis, 2008; De Bruijn & Leeman, 2011). Competency frameworks are also used as a tool for the professional field and higher education to ensure that the interpretation of the competencies is the same between stakeholders (Tran, 2015). Despite much effort to improve alignment between education and the professional field, it is not yet optimal, and the graduates are not always work-ready (Jackson, 2009; McQuaid & Lindsay, 2005; Osmani, Weerakkody, Hindi, Al-Esmail, Eldabi, Kapoor, & Irani, 2015; Tran, 2015).

Literature describes possible factors that may contribute to the lack of alignment between education and the professional field of international business. For example, business schools do not always choose to concentrate on the same competencies that businesses do (Abraham & Karns, 2009). Some competencies may be inadequately addressed, while some may be overrepresented in the curriculum. Another possible contributing factor to a lack of alignment is that the competency frameworks may not be clearly described, and the language used may be confusing (Dragoo & Barrows, 2016; Jackson, 2014). If competency frameworks are not clearly described, this may cause differing interpretations between educators and the professional field (Jackson, 2014). Therefore, it is important for the professional field and educators to collaborate and align with each other so that the competency frameworks are interpreted and used as intended.

To also improve this alignment, student opinions and interpretations of competency frameworks play an important part. If the competency frameworks are not clearly described, they may be confusing and difficult to work with for students. If students work with the competency framework incorrectly, they may not learn what is intended and what the professional field renders important.

Clarity and relevance of competencies is especially important in a social constructivist view on learning where students themselves construe learning outcomes based on competency frameworks. In this type of education, students are stimulated to use experiences to construe new meaning (Bruner, 1990). In this setting, educators fulfil the role of facilitators or mentors (Schell, 2000). They help students to understand the meaning, relevance and meaningfulness of the competency framework used, and guide students to design their own learning outcomes.

According to Tymon (2013), to ensure alignment between education and the professional field, students need to regard the competencies as relevant and meaningful. However, the research of Dragoo & Barrows (2016) and Nodine (2016) showed that competency frameworks are often not clear to students. Therefore, the aim of this paper is to research student perspectives on the clarity and relevance of competency frameworks.

By researching student perspectives on the relevance and meaningfulness of competencies, educators can better facilitate and support students and help them where needed. Educators can support students in formulating their personal learning outcomes in relation to the competencies and improve alignment with the professional field.

1.1 Relevance and meaningfulness

When the relevance of competencies is clear and considered essential, the underlying meaning behind the competencies is also clear, and this is mutually inclusive. When students see the competencies as meaningful and relevant, this influences their motivation to understand and work with them (Vansteenkiste et al., 2006).

A theory concerned with motivation is the self-determination theory (SDT), which describes that intrinsic motivation is stimulated when three basic needs are met: relatedness, competence, and autonomy (Ryan & Deci, 2000). To meet the needs of feeling competent and experiencing autonomy, seeing the relevance of tasks – in this case the competency profile – is important (Ryan & Deci, 2000). When students understand the relevance and goals of the competencies, they are better able to assess their capabilities, and this can enhance their feelings of competence (Jang, Reeve, & Deci., 2010). When the need for competence is met, students may feel better equipped to handle more autonomy, to make choices concerning their goals, and to formulate their own learning outcomes. Competency frameworks can be a guide for students on which to base their learning outcomes, and, therefore, it is important that the relevance of the competencies is clearly communicated to students in order to achieve the learning that is intended (Beck & Kosnik, 2006; Moeller, Theiler & Wu, 2012; Mouratidis, Vansteenkiste, Michou, & Lens, 2013; Reeve, 2009). As students relate relevance and meaningfulness of the competencies to their understanding of the contents of them, it makes clear descriptions of the competencies important (Dragoo and Barrows, 2016; Jang et al, 2010). Especially in the context of being offered freedom and autonomy, interpretation of the competencies by students when formulating learning outcomes may vary and may further enhance the gap between what professionals want graduates to learn and what they actually learn.

1.2 Honors education

Honors programs (HPs) provide a setting in which a social constructivist view on learning is advocated. These programs are described as study programs linked to higher education that are designed for students, who are able and willing to do more than the regular program offers (Scager, Akkerman, Keesen, Mainhard, Pilot, & Wubbels, 2012; Wolfensberger, 2015). Learning outcomes in HPs aim to prepare high performers and have become increasingly popular due to the increasing demand for high performers in the workplace (Wolfensberger, 2015), and this is also the case in international business (Beechler & Woodward, 2009; Farndale, Scullion, & Sparrow, 2010; Florida, 2006; Silzer & Church, 2009; Tarique & Schuler, 2010).

In the HP in IB, the competencies for high performance have been described in the competency profile for highly talented international business professionals (HTIBP) (van Heugten, Heijne-Penninga, Paans, & Wolfensberger, 2016), developed in co-operation with the professional field. The HTIBP profile is used to inform the HP of the competencies and the associated behaviors that need to be further developed. HP students use the HTIBP to

design and formulate their own learning goals, and these are discussed with their mentor. At the end of a learning activity, the HTIBP competency framework is used to check if students have achieved their planned learning outcomes.

Honors students have certain characteristics that differ in a number of areas from regular students. They are typically curious and intrinsically motivated (Scager et al., 2012) and desire more thought-provoking and challenging and complex tasks (Shore & Kanevsky, 1993). In addition, they have a creative and innovative mindset (Banis-den Hertog, 2016), are “more flexible in their use of strategies, have better memories, know more, and prefer complexity” (Scager, Akkerman, Pilot, & Wubbels, 2014, p. 659). Honors students do not like courses that are completely structured and organized (Reis & Renzulli, 2010), and they have a need for autonomy to direct their own learning and formulate their own learning outcomes (Wolfensberger & Offringa, 2012).

That makes honors programs a very suited context to research students’ perspectives on the HTIBP competency profile and whether they perceive the profile as relevant and meaningful in their education.

Therefore, we have formulated the following research question(s):

1. What are the IB honors students’ perspectives on the meaningfulness and relevance of the HTIBP competency profile of highly talented international business professionals?
2. How have the IB honors students perceived using the profile in their education?

2. Methods

2.1 Context of the study

The study was conducted at the Hanze University of Applied Sciences in Groningen, the Netherlands. Students of the honors program (HP), which is part of the undergraduate program in the field of International Business Studies (IBS), participated. This HP is extracurricular, and students receive 30 ECTS credits after completion in addition to the total 240 ECTS credits awarded for the four-year undergraduate program. The HP starts in the first semester of the second year of the IB program and continues through to year four. Talented and motivated students within IBS apply to participate in the program by submitting a written portfolio and attending individual and group interviews. The profile of highly talented international business professionals (HTIBP) (van Heugten et al., 2016) is used as the competency framework (Table 1).

Table 1. HTIBP profile describing the domains and items (behaviors) of highly talented international business professionals (van Heugten et al., 2016)

Domains	Items (behaviors)
Achieving results	Showing perseverance in complex environments
	Taking responsibility for achieving goals
	Showing entrepreneurship
Communicating	Using language effectively in different cultural and professional settings
	Continuing to ask questions to get a clear understanding of the situation
	Listening actively to identify a problem or an opportunity
Innovating	Coming up with creative ideas proactively
	Improving ideas from others
	Keeping up with the latest professional developments
	Showing inventive, new possibilities by thinking 'out of the box'
Seeing patterns and interrelationships in a global context	Adapting one's professional approach to another culture
	Combining expertise from different specialties
	Showing patience and control in culturally diverse environments
Self-reflecting	Showing independence in thinking of new possibilities
	Understanding one's strengths and weaknesses, and acting upon it
	Improving oneself beneficial to the organization

The HTIBP competency profile has been established in collaboration with the professional field and consists of five domains and 16 items or behaviors that characterize excellence (van Heugten et al., 2016). Honors students construe their own learning, using the HTIBP as their reference, and, at the end of their learning journey, the HTIBP is used to inform the final evaluation and assessment.

At the start of the HP, students are assigned a mentor, who acts as a facilitator to guide students through their learning process and with whom an individual learning plan is discussed. Students choose areas that are specifically beneficial to them personally and professionally and formulate learning goals, which are focused towards the domains of the HTIBP. They will base this selection upon the domains of the HTIBP in which they still need to develop and will discuss this with the mentor who will ensure that the choices are in line with the personal or professional goals. Where applicable, the students' learning goals are discussed with an external professional expert.

Students are encouraged to develop their competencies by taking part in (external) projects and assignments, courses, and activities related directly back to their personal goals and professional development and are free to select one of the five domains of HTIBP to be enhanced by a project, assignment, activity, or course of their own choice. Students and the mentor collaboratively write learning outcomes.

Additionally, there are also some projects, courses, and activities offered in the HP, from which students may select one that best fits their own goals. Students have freedom to choose whether they want to demonstrate their learning orally, by making a presentation, in writing in the form of a written report, or by continual assessment.

2.2 Participants and procedure

The IB HP program aims to teach students to become highly talented international business professionals. To gain insight in the students' perspectives on the HTIBP competency framework, we asked them whether the competencies are essential for highly talented business professionals using a survey. Competencies rated as essential are by definition relevant. This survey was conducted among all year two and year four HP students of the IB undergraduate program (N= 41). Students have had some business project and placement experience to have an informed opinion. Students in year three were excluded from the study due to the fact that they were doing a study and work placement abroad and were not active participants in the HP during that time. The survey was administered on paper during the introduction weeks held prior to the start of the academic semesters in September and February of the academic years 2015 and 2016. All data were processed anonymously.

The survey results were further explored by structured interviews to better understand the results from the survey and to add information about IB honors students' perspectives on the meaningfulness and relevance of the HTIBP competency profile of highly talented international business professionals and how they perceived the use of the profile in their education.

The interviews were conducted following a structured interview guide (Appendix A) according to Hennink, Hutter, & Bailey (2010). All final year undergraduate IB program students who participated in the HP (N=12) were invited per e-mail to participate in the interview. These students did not participate in the survey. Informed consent was collected prior to the interviews and the researchers ensured that all data records were kept confidential in line with ethical considerations described by Hennink et al. (2010, p. 63). In total, 10 students participated, and the interviews were conducted in June 2016. The main researcher conducted the interviews, as she was not part of the HP faculty and therefore not

involved in teaching or coaching the targeted students. The interviews lasted between 30 and 40 minutes and were audio recorded, permission for which had been obtained. The interviews were transcribed ad verbatim, and the texts were anonymized to avoid identification of the interviewees (Hennink et al., 2010, p. 63). Students' names have been replaced by letters.

2.3 Instruments

Survey

For the present study, the survey used to establish the HTIBP competency framework was applied (van Heugten et al., 2016). In 2016, this survey was distributed among international business professionals to gauge their level of agreement on whether the domains and the corresponding items are distinguishing for talent. In this study, as we were interested in the student perspectives on the talent profile, the same survey was conducted among honors students. The survey was set up as follows:

In section one of the survey, students were asked to provide demographic information.

In section two of the survey, the students' agreement on the 16 items of the HTIBP profile was gauged. Respondents were asked if the items shown represent highly talented international business professionals. This was measured by scale anchors: 'essential,' 'important but not essential,' or 'not necessary' (Lawshe, 1975). The question asked for all items was: "to what extent do you consider the characteristics listed below important in determining the profile of highly talented international business professionals?" This was repeated in a separate question for the domains of the HTIBP profile. The question for the five domains was: "to what extent, in your opinion, do the domains listed below contribute to defining highly talented international business professionals?"

Interview

We conducted structured interviews with open questions related to understanding the results from the survey and to understanding students' perspectives on the HTIBP.

The interview consisted of four main questions, each subdivided into smaller sub-questions. The first main question enquired about the low scoring items in the survey to understand possible underlying reasons. The questions asked were: "in a student survey, the behavior 'showing entrepreneurship' is, on average, not perceived as essential to talent (and in the professional field it is). What is your opinion on this?" This question was repeated for the item "improving ideas from others." The domain "innovating," while ranked positively, was included in the interview to better understand the view that one of the related behaviors within this domain was perceived as not distinguishing for talent. The question asked was: "in a student survey, the domain 'innovation' is, perceived as essential to talent. What is your opinion on this?"

The second main question was related to gaining insights into students' perspectives on the meaningfulness and relevance of the HTIBP. The questions asked were: "what domains and or behaviors of the HTIBP profile are (the most and the least) meaningful/ significant to you, and could you explain why?"

The third main question was related to assessment. One interview question was dedicated to asking students how the competencies were assessed and whether this method of assessment was meaningful to them.

The last main interview question was to gauge students' general opinion on using the HTIBP profile in the HP and whether the profile was regarded to be complete or would need to be adapted. The questions were: "how did you perceive working with the profile? Are there any domains or behaviors that are missing from the HTIB profile?"

Data-analysis

The survey results were analyzed by calculating the content validity ratio (CVR ratio), a method used to gauge agreement among raters regarding how essential a particular item is (Lawshe, 1975). In this study, the degree of agreement on whether the domains and items (behaviors) in the HTIBP profile are perceived as essential to talent is gauged. In accordance with Lawshe (1975), the following formula was used: $CVR = (N_e - N/2)/(N/2)$. CVR represents content validity ratio, N_e the number of participants indicating that the item (behavior) or domain is "essential," and N the total number of participants. This formula produces values ranging from +1 to -1. Values of 0.0 and above are regarded as positive values, whereby a value of 0.0 shows that half of the raters agree that an item or domain is essential and a value of 1.0 shows full consensus (Lawshe, 1975).

The interviews were recorded and transcribed, and the transcripts served as sources of data for content analysis and were subjected to a qualitative deductive analysis.

All transcripts were read and the questions highlighted to identify them throughout the transcripts. Based on the answers to the questions, the results per question were summarized, which was done by two researchers independently. The summarized answers to the questions were compared between the researchers, and possible discrepancies or inconsistencies were carefully discussed and adapted where necessary.

3. Results

3.1 Student perspectives on the HTIBP profile

On the basis of the survey, we obtained insight into students' perspectives on the HTIBP, and a summary of these results can be found in Table 2. This is followed by the results from the structured interviews, related to understanding the survey results better and to understand students' perspectives.

Table 2. Content validity ratio (CVR) honors students

Domains and items (behaviors)	Judged as “essential” by n -/- honors students	Ratio (cvr)
<i>Domain Achieving results</i>	30/38	0.58
Showing perseverance in complex environments	25/41	0.22
Taking responsibility for achieving goals	33/41	0.61
Showing entrepreneurship	14/41	-0.32
<i>Domain Communication</i>	35/38	0.84
Using language effectively in different cultural and professional settings	29/41	0.41
Continuing to ask questions to get a clear understanding of the situation	29/41	0.41
Listening actively to identify a problem or an opportunity	32/40	0.60
<i>Domain Innovating</i>	25/38	0.32
Coming up with creative ideas proactively	22/41	0.07
Improving ideas from others	11/41	-0.46
Keeping up with the latest professional developments	24/41	0.17
Showing inventive, new possibilities by thinking ‘out of the box’	28/41	0.37
<i>Domain Seeing patterns and interrelationships in a global context</i>	27/38	0.42
Adapting one’s professional approach to another culture	35/41	0.71
Combining expertise from different specialties	29/41	0.41
Showing patience and control in culturally diverse environments	35/41	0.71
<i>Domain Self-reflecting</i>	30/38	0.58
Showing independence in thinking of new possibilities	24/41	0.17
Understanding one’s strengths and weaknesses, and acting upon it	35/41	0.71
Improving oneself beneficial to the organization	25/41	0.22

Students regard the five HTIBP domains as essential, and thus relevant, for highly talented international business professionals (communication CVR 0.84; seeing patterns and interrelationships in a global context CVR 0.42; innovating CVR 0.32; achieving results CVR 0.58; self-reflecting CVR 0.58).

Besides the domains, the associated behaviors belonging to the domains (represented by the items) are mostly regarded as essential. Levels of consensus about the behaviors vary, particularly for the behaviors belonging to the domain self-reflecting, whereby understanding one's strengths and weaknesses has a high CVR (0.71) and showing independence in thinking of new possibilities has a low, albeit positive, CVR (0.17). Two behaviors are not perceived as essential by students which were considered essential by the professional field. These are "improving ideas from others" (CVR -0.46), belonging to the domain innovating, and "showing entrepreneurship" (CVR -0.32), belonging to the domain achieving results. In the interviews, students were asked to give their opinion on the negative survey ratios, and they indicated that the meaning of the behavior "showing entrepreneurship" was unclear to them. They elaborated that if entrepreneurship referred to starting up a new business, it would not be regarded as essential. However, with the meaning of having an entrepreneurial mindset and creating projects and coming up with ideas, then it would be regarded as essential. Students mentioned that they were unsure how the term was intended. The following quote illustrates:

... "what is entrepreneurship? I think it's a very vague word.. . Is entrepreneurship setting up your own business, is entrepreneurship thinking out of the box? ... the word entrepreneurship is so vague and so hard to grip..." (Student H)

The second negative survey ratio, "improving ideas from others," was regarded as essential by the interviewees, which was not in-line with the survey results. In the interviews, students elaborated that, especially in the field of international management, the ability to spot potentially good ideas and build on them by giving good feedback was seen as distinguishing for talented professionals.

The interview results revealed that the domain self-reflecting was the most meaningful to all students. Students described self-reflecting as a powerful competency for performance analysis and self-improvement. Comments included for example: *"It is a nice tool to discover strengths and weaknesses and areas to improve"* (Student A). *"Through self-reflection you learn to understand better and gain insight in how to judge your own work"* (Student B). In addition, students commented that learning to self-reflect did not occur in the regular IB undergraduate program: *"It was never emphasized before."* (Student A)

In addition to self-reflecting, the other four domains, achieving results, communicating, seeing patterns and interrelationships in a global context, and innovation, were found to be meaningful by the interviewees but less frequently and with certain conditions related to meaning. For example, the domain achieving results was mentioned as meaningful but only in relation to the importance of the journey and not the result themselves. Innovating when equated to being creative and out of the box thinking was meaningful to students but not in relation to product innovation. Some quotes to illustrate are:

"Because innovating is something like creating, something new right? I have like kind of stronger relationship with creativity" (Student C). "I cannot relate to innovating" (Student E). "innovating is quite vague" (Student I).

3.2 Using the profile in education

In general, students experienced working with the HTIBP to be meaningful. It provided direction for how to fill in their desired learning, and having the freedom to do so was particularly stressed as useful. Some quotes to illustrate are:

"In hindsight I think it was really useful because using the profile you were really specific about the goals that you wanted to achieve" (Student A). "it helped me realize what I need to focus on" (Student F). "The thing I really value is the freedom of seeing the goal of any domain in the way you wanted" (Student B).

Also, using the framework again as a reflection tool to see if the learning outcomes had been achieved was mentioned.

Interview results regarding assessment of the competency framework showed that assessments were mostly done by students giving presentations to the rest of the HP students and their mentors at the end of completed projects or at the end of the study semester. They were asked to reflect upon their learning journey. Prior to this, students had set up learning outcomes based on the HTIBP in collaboration with their mentors. Students commented that the feedback on their learning outcomes by their mentor and feedback on their learning journey and the end-of-project- and semester presentations was especially meaningful to them.

"It's sharing experiences and getting feedback on that, on an appropriate level" (Student J). "regarding the seminars we are assessed through a presentation. I think it's a very good thing....you can see other people's learning journey....So, the assessment of self-reflection is done really really well" (Student I).

In addition, students embraced learning that occurred outside of the scope of what was planned and found it to be useful. In that context, it was mentioned that, in the students' perspectives, standard assessment would not work and that working with feedback and reflection was much preferred. The following quote illustrates this viewpoint:

"...putting that in a standard assessment form I think does not work so well. Because it is not about knowledge or skills or even not about competencies. It's about application" (student J).

4. Discussion

This study was conducted to gain students' perspectives on the relevance and meaningfulness of the HTIBP competency framework and how they perceived working with it. Results of this study show that the five domains of the HTIBP are regarded as relevant and meaningful, in alignment with the professional field. However, not all behaviors were regarded as meaningful by students. About working with the profile, students experienced it as meaningful, as it was a compass and offered direction to students for how to fill in their desired learning. Connected to this, the freedom to do the former was experienced as particularly meaningful. In addition, students perceived the framework as a meaningful tool to reflect on their learning and to see if the learning outcomes had been achieved.

Although students confirm the relevance of the five HTIBP competencies, they were critical of the relevance and meaningfulness of some behaviors. Cases in point are

“entrepreneurship” and “innovation.” Entrepreneurship was only regarded as meaningful in relation to having a creative and entrepreneurial mindset and not in relation to a business start-up. Students explained that having an entrepreneurial mindset is the underlying skill to help achieve many things, such as a successful business start-up. Entrepreneurship literature shows a development and expansion in the meaning attached to the term. It expanded from idea generation and related business ventures to a broader definition related to behaviors associated with entrepreneurship (Johnson, 2001) and to human capital and the mindset needed to discover opportunities to exploit and develop (Marvel, Davis, & Sproul, 2016). With the focus on interpretations of entrepreneurship changing, consensus on the term is missing (Johnson, 2001; Zhao, 2005). In education, it is important to develop the right skills in relation to entrepreneurship, and, according to Neck and Green (2011, p. 55) “entrepreneurship is complex, chaotic, and lacks any notion of linearity”, also confirmed by a more recent study by Attali and Yemini (2017).

Against this backdrop, and in relation to the results of our study, two things emerge; firstly, the term entrepreneurship is used in the HTIBP framework as a behavior for the domain “achieving results”, whereas it seems that the term entrepreneurship itself has behaviors that can be attached to it (Neck and Green, 2011). It may then be better suited as a domain with its own behaviors. This would create the clarity that is currently missing and needed for students to regard it as meaningful. Without full grasp of what the term entails, misunderstandings will occur. Secondly, students’ opinion that relevance is attached to the broader meaning of entrepreneurship as a mindset seems to be in line with the development of the term over time, and thus frequent and constant updating of the meaning attached to competencies in competency frameworks is necessary.

A similar interpretation condition for students to regard it as meaningful was attached to “innovating”, where students only found it to be meaningful if it referred to creativity and out of the box thinking and not in relation to product innovation only. Students commented that one can be creative without necessarily relating it to new product innovation. Innovating closely ties in with entrepreneurship literature, and both are regarded as mutually inclusive (Veeraraghavan, 2009). Innovation is seen as coming up with something new, and creativity is the underlying multifaceted force that drives innovation and creativity becomes innovation when the idea is put into practice (Veeraraghavan, 2009). According to Lewrick, Omar, Raeside, & Sailer, (2011) innovation is not necessarily invention but rather means being creative in applying what others have invented. The term innovation also seems to be interpreted and explained differently and, similarly to entrepreneurship, it is a complex term, which needs further details. If differences in interpretations and explanations exist in the professional field itself, it may not be surprising that this is also the case when it filters through in education and also proves to be difficult to understand in an educational setting.

5. Conclusions

The results from this study show that students discuss the meaning in relation to the competency framework, and this may be of concern in a more general sense. It shows that meaning attached to certain competencies or behaviors is not always evident, leading to differences or disagreement in interpretation, and this may be the case for more competencies and on a broader scale. Similar lack of alignment between what the

professional field intends and how this aligns with actual learning in an educational setting is seen in other professional fields. Examples can be found in relation to medical and pharmacy education where the need for better communication between educators and the professional field is necessary to improve alignment (Paradis, Zhao, Kellar, & Thompson, 2018; Frenk, Chen, Bhutta, Cohen, Crisp, Evans, ... & Kistnasamy, 2010).

This spurs the need for constant communication and updating of competency frameworks and their associated behaviors to ensure their meaning and interpretations are up-to-date, clear, and similar between all stakeholders. In the context of social constructivist view on competency-based education, whereby students construe their learning outcomes based on a competency framework, it becomes especially important to also involve students as stakeholders in this process of communication about the intended learning outcomes to align with the work field. Besides, as teachers are facilitators and guide students through the learning process, they need to stay up-to-date with meaning and interpretation of competency frameworks to ensure that, with the contents being clear, related meaningfulness can be experienced among students.

Besides results related to interpretation and attached meaningfulness, a further notable result is that meaningfulness was attached to a competency that was novel to students. This was the case with the competency self-reflection. It was new and never offered in the regular IB program, and, therefore, students regarded it as meaningful.

González-Cutre, Sicilia, Sierra, Ferriz, & Hagger (2016) define novelty as “the need to experience something not previously experienced or deviates from everyday routine” (p. 159). They propose that novelty is a fourth basic psychological need to drive motivation in addition to the current three in the self-determination theory: competence, relatedness, and autonomy (González-Cutre et al., 2016). If meaningfulness is related to having a novel experience, or experiencing something novel is considered as one of the basic motivation needs, then this will make adding novel competencies relevant.

In addition to self-reflection being novel and therefore meaningful, the meaningfulness of the self-reflection domain was further enhanced as students perceived it as a binding and omnipresent component of the HP. Self-reflection was used as a powerful means to reflect on the other competencies of the HTIBP competency profile, making it relevant and meaningful to students when working with the HTIBP profile. Self-reflection stimulates critical thinking, which is an important skill that is needed for continuous learning and improvement. The ability to reflect is regarded as an important skill for life-long learning and an important 21st century skill (Helyer, 2015).

The results of this study give some initial insights related to student perceptions on the relevance and meaningfulness of the competencies and if this aligns with the professional field. In students' perspectives meaningfulness of competencies is connected to clarity and novelty of them, and this may help educators to better facilitate students. By better facilitating students, this may contribute to improving alignment with the professional field.

6. Limitations

As data collection was restricted to one educational institution, transferability of the results is limited. Data collection and analysis in multiple IB HPs would improve transferability and may be considered for future research.

The responses of the interviewees may have contained acquiescence bias. However, ensuring that the interviewer was not an HP faculty member may have minimized this. The anonymity associated with the survey may have encouraged participants to be more critical.

In the present study, we have not interviewed faculty to obtain their perspectives on the HTIBP as it was beyond the scope of this study. As faculty may transmit their opinions to students through coursework and interactions, this would be a valuable area for further research.

7. Practical implications

Despite the aforementioned limitations, the research results may inspire some suggestions as to how to improve alignment between education and the professional field.

To help students experience the competencies as relevant and meaningful, clarity of them can be enhanced. Plenary sessions or webinars prior to working with the HTIBP profile to explicate how the behaviors to the domains are intended by the professional field could be organized. Additionally, involving senior students who can also communicate about meaning or interpretation of competencies to students will be beneficial. Furthermore, frequently checking meaning and relevance with the professional field can help with students seeing them as meaningful too.

In addition, calibration between stakeholders may also lead to novel additions to the competency framework, currently perhaps missing. Our research suggests that experiencing novel competencies is related to experiencing meaningfulness, making novel additions to the competency framework important. More flexible competency frameworks, allowing for adaptations and additions, would be beneficial. Mutual sharing of perspectives between all stakeholders can contribute to improving alignment. This should be an iterative process to check the current relevance of the competency framework with the changing demands of the professional field in the fast changing world.

Besides clarity and novel competencies being associated with experiencing relevance and meaningfulness, also educators, in their role as facilitators and mentors, can specifically address relevance and meaningfulness of competencies with students prior to working with them. Thereby, it becomes relevant to ensure that educators have sufficient and relevant business related experience to be able to do this. In part, this may also mean having to allocate extra funding for additional training or business exposure for educators. Besides educators, involving business professionals themselves to enhance relevance and meaningfulness for students is important. Business professionals can be invited as guests speakers to communicate relevance and meaningfulness of competencies. In addition, organizing dialogues between alumni and students can be another way of helping students to perceive competencies as relevant and meaningful.

Our research also shows that self-reflecting was regarded as a powerful means of managing students' own learning, and, while it was one of the domains of the HTIBP, students applied self-reflecting to all the HTIBP domains. If self-reflection is a means for improvement and self-improvement, it could receive focus in regular IB programs, currently neglected (Longmore, Grant, & Golnaraghi, 2018).

References

- Abraham, S. E., & Karns, L. A. (2009). Do business schools value the competencies that businesses value? *Journal of Education for Business*, 84(6), 350-356. doi: 10.3200/JOEB.84.6.350-356
- Allen, J., Ramaekers, G., & van der Velden, R. (2005). Measuring competencies of higher education graduates. *New Directions for Institutional Research*, 126, 49-59. doi: 10.1002/ir.147
- Attali, M. O., & Yemini, M. (2017). Initiating consensus: Stakeholders define entrepreneurship in education. *Educational review*, 69(2), 140-157. doi:10.1080/00131911.2016.1153457
- Banis-den Hertog, J. H. (2016). *X-factor for innovation: Identifying future excellent professionals*. Dissertation. The Netherlands: University of Twente. doi: 10.3990/1.9789036542531
- Beck, C., & Kosnik, C. (2006). *Innovations in teacher education: A social constructivist approach*. Albany: State University of New York Press.
- Beechler, S. & Woodward, I.C. (2009). The global war for talent. *Journal of International Management*, 15(3), 273-285. doi:10.1016/j.intman.2009.01.002
- Biemans, H., Nieuwenhuis, L., Poell, R., Mulder, M., & Wesselink, R. (2004). Competence-based VET in the Netherlands: Background and pitfalls. *Journal of Vocational Education and Training*, 56(4), 523-538. doi: 10.1080/13636820400200268
- Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of Management Development*, 27(1), 5-12. doi: 10.1108/02621710810840730
- Bruner, J. S. (1990). *Acts of meaning*. Harvard, Cambridge, MA: University Press.
- Chyung, S. Y., Stepich, D., & Cox, D. (2006). Building a competency-based curriculum architecture to educate 21st-century business practitioners. *Journal of Education for Business*, 81(6), 307-314. doi: 10.3200/JOEB.81.6.307-314
- De Bruijn, E., & Leeman, Y. (2011). Authentic and self-directed learning in vocational education: Challenges to vocational educators. *Teaching and Teacher Education*, 27(4), 694-702.

De Vos, A., De Hauw, S., & Van der Heijden, B. I. (2011). Competency development and career success: The mediating role of employability. *Journal of vocational behavior*, 79(2), 438-447.

Dragoo, A., & Barrows, R. (2016). Implementing competency-based business curricula in higher education. *Journal of Education for Business*, 91(7), 374-379. doi: 10.1080/08832323.2016.1237932

Farndale, E., Scullion, H. & Sparrow, P. (2010). The role of the corporate HR function in global talent management. *Journal of World Business*, 45(2), 161-168. doi: 10.1016/j.jwb.2009.09.012

Florida, R. (2006). The flight of the creative class: The new global competition for talent. *Liberal Education*, 92(3), 22-29. doi: 10.2307/20031721

Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T., ... & Kistnasamy, B. (2010). Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *The Lancet*, 376(9756), 1923-1958.

González-Cutre, D., Sicilia, Á., Sierra, A. C., Ferriz, R., & Hagger, M. S. (2016). Understanding the need for novelty from the perspective of self-determination theory. *Personality and Individual Differences*, 102, 159-169.

Helyer, R. (2015). Learning through reflection: the critical role of reflection in work-based learning (WBL). *Journal of Work-Applied Management*, 7(1), 15-27. doi.org/10.1108/JWAM-10-2015-003

Hennink, M., Hutter, I., & Bailey, A. (2010). *Qualitative research methods*. London, UK: Sage Publications Limited.

Jackson, D. 2009. Profiling industry-relevant management graduate competencies: The need for a fresh approach. *International Journal of Management Education*, 8(1): 85-98. doi: 10.3794/ijme.81.281

Jackson, D. (2013). Business graduate employability—where are we going wrong? *Higher Education Research & Development*, 32(5), 776-790.

Jackson, D. (2014). Testing a model of undergraduate competence in employability skills and its implications for stakeholders. *Journal of Education and Work*, 27(2), 220-242. doi: 10.1080/13639080.2012.718750

Jang, H., Reeve, J., & Deci, E. L. (2010). Engaging students in learning activities: It is not autonomy support or structure but autonomy support and structure. *Journal of educational psychology*, 102(3), 588-600. doi.org/10.1037/a0019682.

- Johnson, D. (2001). What is innovation and entrepreneurship? Lessons for larger organisations. *Industrial and commercial training*, 33(4), 135-140.
- Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28(4), 563-575.
- Lewrick, M., Omar, M., Raeside, R., & Sailer, K. (2011). Education for entrepreneurship and innovation: Management capabilities for sustainable growth and success. *World Journal of Entrepreneurship, Management and Sustainable Development*, 6(1/2), 1-18.
- Longmore, A. L., Grant, G., & Golnaraghi, G. (2018). Closing the 21st-Century Knowledge Gap: Reconceptualizing Teaching and Learning to Transform Business Education. *Journal of Transformative Education*, 16(3), 197-219.
- Marvel, M. R., Davis, J. L., & Sproul, C. R. (2016). Human capital and entrepreneurship research: A critical review and future directions. *Entrepreneurship Theory and Practice*, 40(3), 599-626.
- McQuaid, Ronald W., & Lindsay, Colin. 2005. The concept of employability. *Urban Studies*, 42(2): 197-219. doi: 10.1080/0042098042000316100
- Moeller, A., Theiler, J., & Wu, C. (2012). Goal setting and student achievement: A longitudinal study. *The Modern Language Journal*, 96, 153–169.
<https://doi.org/10.1111/j.1540-4781.2011.01231.x>.
- Mouratidis, A., Vansteenkiste, M., Michou, A., & Lens, W. (2013). Perceived structure and achievement goals as predictors of students' self-regulated learning and affect and the mediating role of competence need satisfaction. *Learning and Individual differences*, 23, 179–186. doi.org/10.1016/j.lindif.2012.09.001
- Neck, H. M., & Greene, P. G. (2011). Entrepreneurship education: known worlds and new frontiers. *Journal of Small Business Management*, 49(1), 55-70.
- Nodine, T. R. (2016). How did we get here? A brief history of competency-based higher education in the United States. *The Journal of Competency-Based Education*, 1(1), 5-11.
- Osmani, M., Weerakkody, V., Hindi, N. M., Al-Esmail, R., Eldabi, T., Kapoor, K., & Irani, Z., (2015). Identifying the trends and impact of graduate attributes on employability: a literature review. *Tertiary Education and Management*, 21(4), 367-379.
- Paradis, E., Zhao, R., Kellar, J., & Thompson, A. (2018). How are competency frameworks perceived and taught? An exploratory study in the context of pharmacy education. *Perspectives on medical education*, 1-7.
- Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational Psychologist*, 44(3), 159-175.

Reis, S. M., & Renzulli, J. S. (2010). Is there still a need for gifted education? An examination of current research. *Learning and Individual Differences*, 20(4), 308-317.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68.

Scager, K., Akkerman, S. F., Keesen, F., Mainhard, M. T., Pilot, A., & Wubbels, T. (2012). Do honors students have more potential for excellence in their professional lives? *Higher Education*, 64(1), 19-39.

Scager, K., Akkerman, S. F., Pilot, A., & Wubbels, T. (2014). Challenging high-ability students. *Studies in Higher Education*, 39(4), 659-679.

Schell, J. W. (2000). Think about authentic learning and then authentic assessment. In R.L. Custer (Ed.), *Using authentic assessment in vocational education*, (pp. 7-18), Information series no. 381, Columbus, OH. ERIC Clearinghouse on Adult, Career and Vocational Education.

Silzer, R., & Church, A.H. (2009). The pearls and perils of identifying potential. *Industrial and Organizational Psychology*, 2(4), 377-412. doi:10.1111/j.1754-9434.2009.01163.x

Shore, B. M., and Kanevsky, L. (1993). Thinking processes: Being and becoming gifted. In: Heller, K. A., Moenks, F. J., and Passow, A. H. (Eds.), *International handbook of research and development of giftedness and talent*, (pp. 133–147). Oxford: Pergamon.

Tarique, I. and Schuler, R. S. (2010). Global talent management: Literature review, integrative framework, and suggestions for further research. *Journal of World Business*, (45)2, 122-133.

Tran, T. T. (2015). Is graduate employability the 'whole-of-higher-education-issue'? *Journal of Education and Work*, 28(3), 207-227. doi: 10.1080/13639080.2014.900167

Tymon, A. (2013). The student perspective on employability. *Studies in higher education*, 38(6), 841-856.

van Heugten, P., Heijne-Penninga, M., Paans, W., & Wolfensberger, M. (2016). Characteristics of highly talented international business professionals defined: Qualitative study among international business professionals. *European Journal of Training and Development*, 40(2), 58-73. doi: 10.1108/EJTD-04-2015-0032

Van Merriënboer, J.J.G., van der Klink, M.R. & Hendriks, M. (2002). *Competenties: van complicaties tot compromis. Over schuifjes en begrenzers*. Den Haag: Onderwijsraad.

Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational psychologist*, 41(1), 19-31.

Veeraraghavan, V. (2009). Entrepreneurship and innovation. *Asia Pacific Business Review*, 5(1), 14-20.

Wolfensberger, M.V.C., & Offringa, G.J. (2012). Qualities Honors Students Look for in Faculty and Courses revisited. *Journal of the National Honors Council, Fall/Winter*, 171-182

Wolfensberger, M. V. C. (2015). *Talent development in European higher education: Honors programs in the Benelux, Nordic and German-speaking countries*. London: Springer. doi: 10.1007/978-3-319-12919-8

Zhao, F. (2005). Exploring the synergy between entrepreneurship and innovation. *International Journal of Entrepreneurial Behavior & Research*, 11(1), 25-41.

Appendix A. Interview guide

Area	Questions
Exploring survey results	<p>1. In a student survey, the behavior ‘showing entrepreneurship’ is, on average, not perceived as essential to talent (and in the professional field it is). What is your opinion on this?</p> <p>2. In a student survey, the behavior ‘improving ideas from others’ is, on average, not perceived as essential to talent (and in the professional field it is). What is your opinion on this?</p> <p>3. In a student survey, the domain “Innovation” is, perceived as essential to talent. What is your opinion on this?</p>
Students’ perspectives on the meaningfulness and relevance of the HTIBP profile	<p>4. What domains and or behaviors of the HTIBP profile are the most meaningful/ significant to you?</p> <p>4a. Could you explain why?</p> <p>5. What domains and or behaviors of the HTIBP profile are the least meaningful/ significant to you?</p> <p>5a. Could you explain why?</p> <p>6. Are there any domains or behaviors that you have not used?</p>
Assessment	<p>7. How have the competencies of the HTIBP profile been assessed?</p> <p>7a. Have you perceived the assessments as meaningful?</p> <p>7b. Could you explain why?</p>
Students’ perspectives on working with the HTIBP profile	<p>8. How did you perceive working with the HTIBP profile?</p> <p>9. Are there any domains or behaviors that are missing from the HTIB profile?</p>