

EQUIPPING STUDENTS WITH DIGITAL TOOLS FOR E-LEADERSHIP DEVELOPMENT

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ABSTRACT

The purpose of this paper is to share strategies and recommendations for the creation of coursework that equips students with digital tools designed to enhance their e-leadership development journeys. Recommendations were created after analyzing an assignment given to students in an online leadership development graduate course. The assignment directs students to develop a “tool” for leadership development as a first step toward curating a larger-scale “e-leadership toolbox” that could serve as a portfolio of resources designed to help them develop and thrive as leaders in a digital environment. The featured assignment for this course directs students to describe how they could create and leverage a virtual board of directors, implement and reflect on personal branding efforts, or find value in e-mentorship strategies. Students use this assignment as an opportunity to apply the course material that relates to strategies used to cultivate accountability in the leadership development process. The assignment encourages students to think critically about course concepts and provides an opportunity to apply the concepts directly to their roles in their current or desired future workplace or industry. Reflecting on the assignment has allowed this researcher to provide recommendations intended to inspire creative ideas and inform curricular best practices in online (and often interdisciplinary) social science programs that seek to prepare students to thrive in technology-mediated work environments.

INTRODUCTION

In 2020, the COVID-19 global pandemic affected organizations worldwide and will no doubt have long-term effects on the way people work and how organizations achieve outcomes. While the rise in popularity of remote work had already precipitated a need for increased emphasis on teaching e-leadership skills in social science programs, the pandemic has created a more urgent demand for excellence in employees’ abilities to lead their workforce in digital environments. This urgency has prompted faculty to consider new ways to help students gain an understanding of e-leadership to meet their needs and the needs of their employers. As one Master of Science in Leadership program considers options to help meet those needs in a practical way, we have started to consider the creation of an “e-leadership toolbox” that students could maintain and use as needed throughout their time in the program and beyond.

With a potential long-term goal of creating a program-wide “toolbox” for students, one faculty member has taken a first step toward its creation and potential implementation in a leadership development course. A brief review of the body of literature on both the importance of e-leadership skills and creative approaches to leadership development highlights an

opportunity for educators to urge students to discover and explore digital tools designed for practical use that allow them to apply the course material beyond the classroom. Curricula across leadership-focused graduate programs often contain an element that addresses e-leadership mainly through content focused on virtual team leadership or management. The question explored in this practice is “How can instructors help students in graduate-level leadership development courses develop or refine creative strategies for e-leadership beyond leading virtual teams?” In this paper, the focus is on an assignment designed to help the student increase ownership and accountability for their efforts in leadership development, with an emphasis on e-leadership skills.

REVIEW OF LITERATURE

The Rise of e-Leadership

Avolio et al. (2014) defines e-leadership as “a social influence process embedded in both proximal and distal contexts mediated by advanced information technology that can produce a change in attitudes, feelings, thinking, behavior, and performance” (p. 107). While the formal study of leadership and organizational behavior has been popular for many decades, e-leadership is a relatively new sub-topic of study (Avolio et al., 2000). The rise of telecommuting and online work in modern workplaces continues to bring much attention to this concept as leaders face new challenges in running increasingly remote work environments. Liu et al. (2018) reported that energy (to engage in continuous learning and master relevant technologies) and well-honed analytical skills were among the most important e-leadership skills. Similarly, other researchers identified and organized “...six skill-based competencies that successful e-leaders should aim to master. The competencies are: e-communication, e-social skills, e-team building skills, e-change management, e-technological skills, and e-trustworthiness” (Van Wart et al., 2019, p. 91). Other scholars suggested focusing on the often juxtaposed processes exacerbated by remote work. Purvanova and Kenda (2018) highlighted the need for e-leaders to master the balancing act between opposing behaviors, such as “manage productivity and inspire performance-beyond-expectations, set clear goals and form meaningful relationships, manage the process and encourage individuality and flexibility” (p. 776).

DuBrin (2023) reported that virtual work teams surged during the onset of the COVID-19 pandemic, and that due to the many benefits realized, organizations are increasingly adopting this practice for the long-term. As this trend becomes a sustainable practice for many organizations, the need for e-leadership learning becomes even more time-sensitive. Virtual managers are tasked with crafting and supervising performance benchmarks for remote employees – a process sometimes entirely mediated by technology. DuBrin found that challenges in navigating those processes remotely are often rooted in poor communication and a lack of trust that sometimes plagues virtual workspaces. His research supports engaging in some specific e-leadership skill development activities to provide solutions to e-leadership challenges. These skills include establishing trust through transparent communication, leveraging and appreciating team diversity, and enhancing the visibility of the work of the virtual team.

Leadership educators have incorporated research on successfully leading remote work teams into various courses for many years, but the evolving formal body of literature continues to identify and refine these additional skillsets needed to be a successful e-leader. Academic programs need to be a quick study on this topic in order to revise or develop appropriate curricula that promotes current, relevant skill development. Van Wart et al. (2019) highlighted the intense speed of workplace changes in the digital era, which has obviously outpaced the speed of research in this area. These changes are constantly creating new challenges for both workplace leaders charged with leading effectively via digital channels and academics responsible for managing curricula that will prepare leaders for their responsibilities in the workplace.

Digital Leadership Development

As more organizations allow (or sometimes – in the wake of a global pandemic - mandate) employees to work remotely, e-leadership skills are increasingly emphasized in organizational efforts toward leadership development, even while leaders are scrambling to determine what the exact outcomes of those efforts should be (Byrd, 2019). Graduate programs in the social sciences often include courses in leadership development, which focus on development of the leadership capacity of self and/or others (Stork et al., 2015). The rise of e-work has prompted ongoing questions for leadership educators teaching courses in leadership development, including: How can/should we update curricula or course materials to meet the needs of the modern remote workforce? What should we be teaching that specifically applies to leadership development in a digital environment? (Van Wart et al., 2019)

Industry leaders continue to provide feedback to universities that graduates often lack in soft skills needed to succeed in the workplace (Jaschik, 2015). Researchers have studied many organizations and found that companies that offer specific e-leadership professional development and training opportunities are more prepared to face the challenges present in increasingly global markets (McCann & Kohntopp, 2019). Iordanoglou (2018) reported that as organizations increase their desire to improve leadership development efforts, they must proactively offer such training to employees much earlier than current organizational norms typically provide. She also concluded that leadership development efforts “should start with personal dream and vision, involve peer to peer coaching and coaching with compassion, and establish close and caring relationships...” (p. 127). Jenkins (2018) provided a more narrow suggestion by listing important themes for online leadership development courses, including “self-understanding, action learning, interaction, contextual, knowledge evaluations, follow-up, mentorships, and self-advancement” (p. 72). While the content for effective modern e-leadership development in organizations is clearly evolving rapidly, academic programs can benefit from these insights as we equip our students with appropriate skills in this area.

Byrd (2019) articulated some of the challenges of honing and delivering leadership development content in an online environment. She found that organizations can overcome some of those challenges by delivering information via “virtual action learning” due to its heavy emphasis on leaders building and maintaining relationships. An amplified cognizance of the

challenges organizations face as they work to identify the desired competencies and objectives for training - in addition to the ideal methods of delivery for that training - has moved this issue toward the spotlight in leadership education.

Developing an e-Leadership Toolbox

The increasing prominence and importance of e-leadership skills in organizations sparked the idea of incorporating the concept throughout the curriculum of our Master of Science in Leadership program. Many of our course learning outcomes focus on preparing students to understand organizational dynamics and to appreciate and be prepared for leadership roles in their organizations. At present, we must consider that many of these organizations can and will accomplish their work virtually.

Graduate-level students expect to gain practical knowledge and skills, and a virtual “toolbox” is one way to help them take that knowledge with them, allowing for convenient recall in the future. Similar to an academic e-portfolio, we are considering the implementation of this “e-leadership toolbox” and using the assignment in the leadership development course as a first step toward directing students to develop a “tool” to include. The aim of the toolbox is to allow students to develop and organize their own tangible e-leadership artifacts that could enhance their ability to turn theory into practice, though we realize that the potential adoption and implementation of such a system would require planning, resources, and buy-in from multiple parties to be effective for students (San Jose, 2017).

The efficacy of e-portfolios in graduate programs has received mixed reviews from educational researchers. Faculty in graduate programs in various disciplines have identified e-portfolios as one way to assess how well students meet program learning objectives. Students reported perceived benefits from compiling their work as the process of creating a portfolio allowed them to more clearly recognize connections between their studies and opportunities to apply their new knowledge in their work environments (Goertzen et al., 2016). Driessen (2017) found that reflective portfolios are often viewed as obligatory and generally unhelpful by both students and educators. However, comprehensive portfolios built throughout the course of a program that contain diverse artifacts are viewed by students as helpful resources after graduation (Driessen, 2017; Kruger et al., 2013; Munday, 2017; Reese & Levy, 2009) and can “help individuals present a more comprehensive professional persona” (Kruger et al., 2013, p. 51). The proposed toolbox in the present case is intended to be an organized, themed repository/portfolio for students to visit and re-visit as they face real-world leadership challenges in the future rather than a tool for assessment. As an academic leadership program, we recognize that appropriate real-world leadership approaches and skills are situational, rather than one-size-fits-all. Our hope is that our graduates would view the e-leadership toolbox as one resource at their disposal as they consider options for addressing challenges with leadership situations that are mediated by technology.

DESCRIPTION OF THE PRACTICE

While pursuing the Master of Science in Leadership program at a regional, public university in the southeastern region of the United States, students can choose to take Leadership Development as an elective course. This program is entirely online and courses are offered in an 8-week accelerated format. The course description states, “This course will provide participants with knowledge regarding effective strategies for leadership development for others and themselves. The course combines theory and research to provide practical examples for creative mentorship strategies and structuring experiences for leadership development.” Students engage with content on giving and receiving feedback, cultivating psychological safety in the workplace, mentoring, personal brand management, building trust, and diversity, equity, and inclusion programming. Various strategies for each of these topics are presented, and students complete written assignments in which they apply these strategies to realistic scenarios.

This fully online program has been operating in its current form for about five years. After a change in degree designation and a full curriculum overhaul, the program has seen a rapid increase in enrollment. This program serves a diverse group of students – in terms of demographics, professional background, and level of work experience. To better equip our students to answer the call for leaders to develop e-leadership skills that go beyond addressing the leadership of remote work teams, the “e-leadership toolbox” concept is under preliminary consideration as a whole-program approach. This method would allow students to maintain an organized portfolio of practical assignments that can assist them indefinitely after graduation.

While the ultimate goal is to assess the desirability and feasibility of expanding the toolbox concept program-wide, this paper examines the exploratory implementation of the concept in one specific course. In an effort to create an innovative assignment that is both practical and valuable for students who increasingly find themselves living and working in a mostly-virtual environment, the e-leadership unit within the leadership development course was a natural place to begin this effort.

To best serve the diverse study body, the instructor’s goal was to create an assignment students could find valuable no matter their phase of career. After reflecting on the course material and learning objective (practicing strategies to effectively develop self and others as leaders), the instructor decided to build the final course assignment on the concepts of mentoring and personal branding, which are practices that can foster leadership development in a virtual environment (Greene, 2015). Students prepared for this assignment with several readings, including the book *Creative Mentorship and Career-Building Strategies* by Mary Pender Greene (2015). This book provides guidance on many types of mentoring - including peer mentoring, reverse mentoring, and situational mentoring - and realistic examples of effectively engaging in those practices. Additionally, Greene describes and recommends the creation of a Virtual Personal Board of Directors (VPBOD) as a tool for leadership development. She defines the VPBOD as “a group of trusted and respected advisors, corresponding to specific aspects of your professional life” (p. 30). Students are encouraged to fill specific roles on that board, to include Technical Officer, Financial Officer, Ethics and Morals Officer, Political Analyst, and Marketing

and Branding Officer. The goal is for each role applicable to the individual's professional situation to be filled with an appropriate mentor. Students also read peer-reviewed journal articles related to various facets of virtual mentoring (Evans, 2018; Neely et al., 2017) and the importance of leveraging virtual professional networks and personal branding efforts to cultivate leadership opportunities (Gorbatov et al., 2018; Hoppe & Reinelt, 2010; McCallum & O'Connell, 2009; Milovanović, 2015). Personal branding is defined by Gorbatov et al. (2018) as "a strategic process of creating, positioning, and maintaining a positive impression of oneself, based in a unique combination of individual characteristics, which signal a certain promise to the target audience through a differentiated narrative and imagery" (p. 6). Contemporary personal branding efforts are now mostly mediated by technology.

Students taking this course worked toward the learning objective of practicing strategies to effectively develop self and others as leaders. They were prompted throughout the course to study and reflect on mentorship-related practices. Refining these processes equips them with the knowledge to encourage their mentees, followers, or team members to engage in effective mentorship when appropriate. As described below, they were tasked with engaging in an activity for their own self-development now to increase their familiarity with the practice and boost their confidence in the process. The artifact or "tool" created in this assignment was designed and intended to assist students in learning a helpful practice that they could reference throughout their career as they serve as mentors and work to guide leadership development efforts for others. Student instructions for the final assignment were as follows:

Students can choose one of the following three options for this project. Choose the one that you feel will have the most meaning for you personally in your phase of career/leadership development.

Option #1: After reading the assigned text/articles on creating a virtual personal board of directors, write an APA-style essay about *your* virtual personal board of directors. In 4 - 6 pages, provide specific information about a few of the roles/players you would include, how you would build your board, and how you would leverage your board. Be specific in regards to ways your board will help you reach your career goals.

Option #2: After reading the assigned text/articles on personal branding, create a 10 - 15 minute video describing your own personal brand. You can record yourself doing a presentation, or you can narrate a PowerPoint or Prezi presentation and save it as a video file. Include information about how you will build (or have built) your personal brand and how your efforts could help you achieve your specific career goals.

Option #3: After reading the assigned text/articles on types of e-mentors, choose at least two of the types of mentors described. Write a 4 - 6 page APA style essay explaining how you believe you could benefit from being mentored in one of these ways, and how you and a mentee could both benefit from you providing mentorship in one of these ways. (So, in one scenario, you are the mentor, and in the other you are the mentee.) For example, you might feel that you could benefit as a mentee from traditional e-mentorship in a certain area, and that you could provide

effective peer e-mentorship in another area. Be specific in regards to ways both of these e-mentorship experiences could help you reach your career goals.

DISCUSSION OF OUTCOMES/RESULTS

Students were given the option to complete one of the three assignments mentioned above in the 2019, 2020, 2021, and 2022 sections of the leadership development course. Outlined in Table 1 are the total enrollment for each section, and the number and the percentage of students who selected each assignment option.

		Mentoring		Virtual Personal Board of Directors		Personal Branding	
Year	Enrollment	# of Students	% of Students	# of Students	% of Students	# of Students	% of Students
2019	9	6	66%	3	34%	0	0%
2020	11	5	45%	4	37%	2	18%
2021	7	3	43%	3	43%	1	14%
2022	6	1	17%	4	66%	1	17%

Student work was submitted individually and directly to the instructor through the learning management system. All projects were assessed only by the instructor, using an original grading rubric. Eighty percent of the grade was based on project conceptualization, and twenty percent was evaluated on organization, professionalism, mechanics, etc. Regarding conceptualization, projects were assessed based on several factors, including appropriateness of topic to meet the learning objective (practicing strategies to effectively develop self and others as leaders), thoroughly and accurately applying appropriate information from the readings, and incorporating thoughtful reflection where appropriate (see excerpt from grading rubric in Table 2 below).

Table 2. <i>Assignment Grading Rubric</i>				
Conceptualization. Points Possible: 40 points				
Unacceptable: 0 points	Poor: 1 – 13 points	Fair: 14 – 27 points	Good: 28 – 39 points	Excellent: 40 points
Strategy not appropriate; information not linked to Creative Mentorship text	Strategy not completely appropriate; Covers some of the project and somewhat links to the topics in the text	Appropriate strategy; Covers parts of project and somewhat links to the topics in the text	Appropriate strategy; Covers all items in instructions; highlights/relates to the appropriate information from the text; Some reflection	Appropriate strategy; Thorough; highlights/relates to appropriate information from the text; Thoughtful reflection

After recording and reflecting on observations about the topics addressed in the assignments each year, the instructor identified several interesting themes in student responses to each assignment, as described below.

Option #1: Virtual personal board of directors. Students tended to apply course material here on the importance of building a professional network, leveraging social media and live events to build and maintain a professional network, emphasizing the benefits of diversity among board members, and (when applicable) maintaining a balance of board members that work in their current field and their desired field. Many students who were not yet working in their career full-time were able to identify individuals for their virtual personal board of directors who could be of assistance to them on their journey toward their career path.

Option #2: Personal branding. Students emphasized many important elements of personal branding, including social media presence, taking an online-but-actionable public stance toward social justice, volunteering, community involvement, networking, and professional behaviors.

Option #3: E-mentorship. Most students emphasized the growing importance and convenience of e-mentorship as a tool both to mentor others and to be mentored. While many had not formally studied this practice in an academic setting, most seemed to be familiar with it or have experience with it in some sense. This seems to be quite popular in practice and students were noticeably excited about it as they researched best practices and shared what has (or has not) worked for them in the past, and what formal-but-flexible e-mentorship goals they had in mind for the future.

REFLECTIONS OF THE PRACTITIONER

In the sections of the course taught thus far, students selected the personal branding assignment less than either of the other options. The instructor wondered if this was partially due to the assignment instructions listing the submission method as a video rather than a written document in the 2019 and 2020 sections. In the 2021 and 2022 sections, the instructor allowed the students to choose writing an essay or creating a video for any of the three prompts, since the

objectives could be achieved in either modality for each assignment, but still only 14 % - 17% of students chose that option.

In future terms, the instructor plans to implement updates to the course readings and assignment as the literature and frequency of remote working conditions continue to evolve. The learning objective “practicing strategies to effectively develop self and others as leaders” can be met in multiple ways, and this assignment could be implemented more broadly to allow students to apply the material in different ways. For example, students may benefit from designing a mentor training session for their organization (or an organization they aspire to work for). This could allow them to apply the material they engage with throughout the course to a real-world setting (virtual or otherwise). Alternatively, students may enjoy meeting the objective by reading a case study that highlights a need for leadership development efforts and suggesting solutions to develop the leadership capacity of employees on their team. This assignment could be enhanced by using one scenario that involves face-to-face teams and another that involves virtual teams. This could create some interesting opportunities for students to compare and contrast efforts that are appropriate in various scenarios.

If the toolbox concept is adopted by the program, faculty will need to discuss this and other options for course assignments in each course offering. New questions will most certainly arise, including: How can/should students collect their ideas – what platform should they use to build their toolboxes? How can we ensure the e-leadership assignments are scalable for application in many industries? Will program faculty be expected to blur the boundaries between teaching and modeling behaviors? How does social media fit in (faculty blogs/accounts, information sharing, personal branding, sharing of original research, etc.)? How can faculty model e-leadership behaviors and stress the importance of e-leadership skills to students while accelerated degrees are shrinking timelines for our programs? Can a leadership educator with no digital footprint teach students about e-leadership, and if so, how? Should students be encouraged to share their toolboxes with one another – and if so, should the toolboxes be presented virtually in a symposium? How can students share this toolbox with their employer, if desired? The body of literature on implementing e-portfolio systems will be an important resource upon implementation.

Graduate programs in the social sciences have long been preparing working adults with the relevant skills to lead virtual teams. Now that employees increasingly find themselves working in virtual spaces, other facets of the study of e-leadership must shift accordingly. As educators, responding to the changing needs of our students is crucial, and in this case, a one-course-at-a-time approach has made the journey toward providing an e-leadership “toolbox” for our students feel like an intentional process that can be replicated across the curriculum.

IMPLICATIONS FOR PRACTICE

While the assignment analyzed for this paper was given in the context of a leadership graduate program, several strategies drawn from the project can be applied to various disciplines, at both the graduate and undergraduate levels. As mentioned in the Literature Review, portfolios are implemented in programs across disciplines with variable levels of success.

Incorporating an e-portfolio system within a program could have positive implications for accreditation and quality enhancement of the degree program(s). Programs pursuing accreditation are often required to assess student learning using both direct and indirect measures. An e-portfolio could serve as a work product that can be scored by an internal or external assessment team. In the example of the e-leadership toolbox, program administrators would also be able to show accreditors how students are applying the information learned in the program to real-world concepts that will help them succeed in the modern workforce.

Establishing a common thread throughout a program could also have positive implications for program marketing. In the instance described in this paper, e-leadership could provide an attractive element for marketing and admissions staff to focus on as they differentiate the program from others offered in the same region and/or discipline. Highlighting timely skills that students will take away from a program that can immediately be applied in a work setting could sway prospective students to view the program as more interesting or practical than a competing option. While this paper focused on the thread of e-leadership to be woven through a Master of Science in Leadership program, the concept is scalable for other disciplines as well. Some potential examples include: weaving a thread of ethical decision-making through a Healthcare Administration program; weaving threads of equity and social justice through a Business Administration program; weaving threads of creativity and innovation through an Engineering program; weaving a thread of professional communication skills through a Teacher Education program. This concept could be scaled and replicated as program needs and local, regional, or national industry needs evolve.

This practice could also have practical implications for student organizations typically sponsored outside of academic departments. The assignment design and e-leadership toolbox concept could potentially be scaled to benefit students in a co-curricular setting. For example, non-credit bearing university-sponsored leadership development programming could implement a version of this assignment in a workshop-style event. Students could feasibly learn about one of the concepts (mentoring, Virtual Personal Board of Directors, or personal branding) in a typical workshop format and then work individually or together in groups to produce an artifact that prompts them to apply the information in a useful way. Some student organizations that maintain even a partial focus on leadership development (student government, social student organizations, leadership societies, sports teams, etc.) could also benefit from these types of exercises.

While formal mentoring partnerships between established and new members in student organizations are likely a long-standing tradition, the other concepts may be novel for these groups. For example, a concerted effort toward educating athletes on personal branding efforts that could work to unify and strengthen their overall team “brand” could prove to be beneficial to multiple stakeholders. The leadership lessons that are ingrained in team sports could be enhanced by a properly scaled exercise in increasing individual leadership capacity through goal-setting and strategic planning efforts designed to support the development and management of individuals’ personal brands.

RECOMMENDATIONS

Students were able to meet the learning objectives for this assignment by completing any of the three options presented. Providing choices to students for assignments is often well-received as students tend to enjoy some level of autonomy in their educational experience. Graduate students in particular tend to appreciate assignments that are applicable to their personal careers (Holzweiss et al., 2014; Lee et al., 2015). It is recommended that instructors provide the students with some flexible options that will allow them to meet the objective and create their artifact or “tool” in a way that is meaningful to them.

Initiatives for developing “e-leadership toolbox” items for additional courses are also recommended. Current tentative topics (informed by the e-leadership competencies identified by Van Wart et al., 2019) to be explored in our program include developing and maintaining e-trustworthiness (in the Ethics course), working in virtual teams (in the Small Group Leadership course), communicating online (in the Communication Strategies for Leadership course), and virtual civic engagement (in the Community Leadership course). Programs in other disciplines can emulate this one-course-at-a-time approach by moving through their own assessment or curriculum framework.

LIMITATIONS AND FUTURE DIRECTIONS

This project provides useful reflections and recommendations to assist faculty as they explore options for creative assignments for e-leadership development and/or develop a manageable plan for a new or re-designed portfolio system; however, limitations exist in this example. The sample size for this project was quite small. Smaller class sizes in our elective courses make them ideal for more easily implementing new ideas or strategies. Our total enrollment in the graduate program is typically between 70 and 80, and the researcher recognizes that larger programs would require more resources to implement significant changes.

As always, insights gained beget more questions for future projects. Could this practice be used to inform/develop a new concentration within a program, or perhaps a new micro-credential (such as a graduate certificate or a digital badge)? Could this concept be scaled to serve specific employers or organizations who are shifting to a virtual format for their employees/teams? In this instance, we are exploring the bigger concept of building an “e-leadership toolbox” by starting with the assignment discussed here. Perhaps other programs would identify a different thread that runs across their curriculum and could build a toolbox with a different focus. What value could/would that focus add for students?

Online enrollment for graduate-level social science programs and the number of employees who work from home are both still trending upward. Creating an e-leadership “toolbox” for students to use indefinitely after their program could have benefits for employees and employers for years to come.

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