

GRADUATE STUDENTS AS LEADERS AND FOLLOWERS: EFFECTIVE PRACTICES FOR MENTORING AND BEING MENTORED

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Graduate student development depends heavily upon effective mentoring. The ideal outcome is a scholar and/or professional who can work independently, not simply following in the footsteps and example of their mentor(s). In many instances, the developmental process requires the graduate student to be a mentor to others, whether that be for less experienced scholars (e.g., undergraduate students) or in a reverse mentoring role (e.g., guiding their faculty advisor). Effective mentoring is particularly challenging when the relationship is mediated through virtual engagement, which is the case for many

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online degree programs. The current article illuminates important considerations and strategies for success when facing these challenges. Particular attention is given to the openness framework, which highlights the importance of being open to change, feedback, action, and accountability.

Introduction

Graduate education is evolving in ways that are helping humanity “solve the world’s most complex and challenging problems” (Kaufman & Stedman, 2022, p. 11). However, there are limits to what can be achieved through prescribed approaches to formal education and engagement. More holistic approaches to learning and development are needed to advance graduate education. Fortunately, opportunities exist to “unlock the potential of mentor/mentee relationships” (Kaufman, 2021).

Mentoring of graduate students is sometimes referred to as advising, coaching, or educational supervising. However, as noted by the National Academies, mentoring is more than a formal pairing:

An adviser might or might not be a mentor, depending on the quality of the relationship. A mentoring relationship develops over an extended period, during which a student’s needs and the nature of the relationship tend to change. A mentor will try to be aware of these changes and vary the degree and type of attention, help, advice, information, and encouragement that he or she provides. In the broad sense intended here, a mentor is someone who takes a special interest in helping another person develop into a successful professional. (Institute of Medicine, National Academy of Sciences, and National Academy of Engineering, 1997, pp. 1–2)

Positive mentoring relationships contribute to graduate students’ self-efficacy, sense of belonging, academic persistence, and professional success, especially if cultural sensitivity from the mentor takes place (Kraft et al., 2023; Mullen, 2021; Orsini & Coers, 2022; Pollard & Kumar, 2021; SANCZYK et al., 2021). In the context of leadership development, Dziczkowski (2013) reported “the benefits of both mentors and mentees are extensive, ranging from increased self-esteem, awareness, insight, and professional skills to reduction of stress” (p. 351). Unfortunately, some graduate

students—especially during the thesis or dissertation stage—have reported not receiving effective mentoring from their mentors (Mullen, 2021; Tuma et al., 2021). Problems include faculty failing to provide feedback, lacking compassion or empathy for students, or even giving rushed feedback; transitioning to online formats exacerbated the ineffectiveness (Mullen, 2021).

Importantly, mentorship can flow both ways. In a video titled “What I Got Wrong About Mentorship,” Sinek (2020) noted that “mentorship is like friendship: it evolves over time, and it’s a two-way street.” Furthermore, because students sometimes have supervisory responsibilities as part of their graduate programs (e.g., serving a teaching assistant or a research project manager), they can find themselves simultaneously in both a learning mode and a mentoring mode.

Learning Mode: Graduate Students as Mentees

In the learning mode, graduate students depend upon guidance and insight from their mentors:

Mentees aren’t just learning concrete skills from their mentors. They’re also picking up how their mentors come up with research questions, how they brainstorm, how they interact with collaborators, and so on—knowledge that is difficult to codify and often learned by doing. (Allen, 2020, para. 24)

The secret to success with this learning is to adopt a mindset of openness and receptivity. With that in mind, the role of the graduate student is to be coachable. In their book titled *Becoming Coachable*, Osman et al. (2023) argued those who benefit the most from coaching do so because they are open to change, feedback, action, and accountability.

Fundamentally, learning is about change. As Goldsmith (2008) quipped in one of his books by the same title, *What Got You Here Won’t Get You There*. Being open to change requires a willingness to explore alter-

nate approaches, or what Grant described as “thinking again.” According to Grant (2021): “Thinking like a scientist involves more than just reacting with an open mind. It means being actively open-minded” (p. 25). When a graduate student approaches their learning like a series of experiments, they are likely to embrace the growth mindset that is needed to benefit from a healthy mentoring relationship. While not all experiments result in a prescription for change, the openness to change helps ensure a readiness to learn.

Openness to feedback is another prerequisite to learning. Although “feedback” has been flagged as a harsh word and anxiety-provoking (Bruell & Ellis, 2023), it does not need to be. Some faculty have adopted an appreciative inquiry approach to mentoring, focusing on students’ aspirations as a foundation of the advising relationship (Coker, 2023). The key is to focus attention on the gap between the intended goal and the current reality. If it helps to frame this as a “feedforward” process, so be it; the basic idea remains that critical reflection helps guide exploration of possibilities for improvement.

Building from that mindset, “becoming coachable means being open to taking action” (Osman et al., 2023, p. 125). The work of graduate students and the fields they enter following graduate school is knowledge work and requires complex cognitive functions, but that does not eliminate the need for action. Sometimes, the action is in the form of capturing notes and/or transforming abstract thoughts to written manuscripts. Other times, the action may involve direct engagement with stakeholders, facilitating the problem-solving process. In effective mentoring relationships, the path to action might follow the model of situational leadership theory, where more responsibility is expected as the mentee advances in their development (Klinge, 2015; Nobles & Fraizer, 2017).

As the mentoring relationship evolves, further success depends upon accountability. Among available tools, the “Student-Advisor Expectation Scales” promotes conversation about expectations for the mentoring relationship, and several items address accountability, including allocation of time and attention to quality (Golde, 2010). Although expectations may vary in different mentoring relationships, clarity of expectations

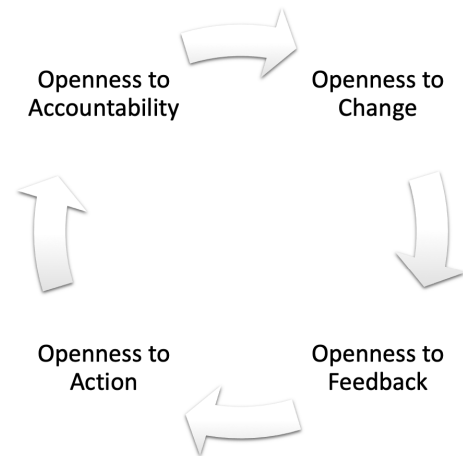


Figure 1 Virtuous Cycle of the Openness Framework for Learning

early in the process helps with accountability later. When the mentor and the mentee begin their relationship with a shared understanding of each of their roles, it increases the potential for mutual accountability (Ocobock et al., 2022).

Reflecting on the openness framework provided by Osman et al. (2023), it may seem like the four tenets (openness to change, feedback, action, and accountability) are merely foundational blocks (i.e., once they are set, you can move on). However, these tenets form a virtuous cycle that support and encourage ongoing learning throughout the mentoring relationship (see Figure 1). Accordingly, these tenets can be used to promote and facilitate a positive mentoring relationship at any stage.

As a graduate student progresses through the openness framework, they often begin to realize that the openness to change, feedback, action, and accountability is not limited to the relationship with their formal mentor or those who are more experienced. Opportunities arise for new relationships, including opportunities to engage in mentoring others.

Mentoring Mode: Graduate Students as Mentors

While graduate students clearly benefit from being mentored, their professional development often involves mentoring others including less experienced scholars (e.g., undergraduate students), reverse men-

toring roles (e.g., guiding their faculty advisor), and peer mentoring of fellow graduate students. Peer mentoring is particularly impactful because many graduate students struggle with isolation, building community, and connecting with peers (Ray et al., 2019). While the graduate student experience appears to be a shared experience, it often leaves students feeling alone. One effective way for promoting connectedness has been through graduate student peer mentoring initiatives.

According to Ender and Newton (2000) successful peer mentoring includes four factors: making a personal commitment, respecting abilities and choices, listening, and appreciating. While these four behaviors may seem simplistic, they are foundational for the complexities of graduate student life, which may require a more intentional and strategic approach. As in many discussions around mentoring, identifying how the mentoring match should be made is often the first consideration. Holley and Caldwell (2012) identified the various factors that influence quality mentoring in graduate school: student demographics, international status, and even the type of science the student is pursuing, which alters the needs and perceptions of mentoring.

Research suggests the “majority” of students participating in formal mentoring programs find the experience and outcomes to be beneficial (Lorenzetti et al., 2019). Universities and departments can approach the development of peer mentoring programs in a number of ways. For example, the University of Florida (UF) has opted to train graduate students in the benefits of mentoring, including peer mentoring, as well as “mentoring up,” through IMAGE—the Inclusive Mentoring Academy for Graduate Education (UF Graduate School, 2023). And, like many other programs across the country being developed, providing graduate students with tools, strategies, and frameworks for quality mentoring is key.

The importance of these relationships is revealed in findings from research on mentor–mentee relationships: “Working with a supportive, more experienced colleague can help you develop into the best version of yourself. And guiding a colleague toward

their full potential can help you hone your coaching skills while shaping the next generation of leaders” (Ford, 2018, para. 1). Knowing that these relationships may help mitigate isolation, depression, and loss of connection; institutions have a responsibility to support and create an infrastructure that welcomes, guides, and encourages peer-based mentoring in graduate education.

New Frontiers: Virtual Engagement

Although online graduate programs have existed for decades, following the COVID-19 pandemic, more students have transitioned to online programs and remained there. Online graduate programs operate as synchronous or asynchronous and offer the student every aspect of being on campus from a virtual format. While this benefits students from an accessibility feature, mentoring can prove difficult when mentees are fully online and not physically near their mentors (Byrnes et al., 2019; Mullen, 2021; Pollard & Kumar, 2021).

Once reserved for for-profit institutions, online offerings have expanded at public and private universities, making graduate programs available to nontraditional learners who could only devote part of their time to a degree program. While the focus on teaching and learning online may have increased during and after the pandemic, universities have focused as much attention to the mentoring practices that help online graduate students succeed (Mullen, 2021). One reason may be due to the fact that online graduate students are different from on-campus graduate students.

Online graduate students are more likely to attend part-time while having multiple responsibilities such as full-time work schedules, family obligations, childcare, and more (Byrnes et al., 2019; Kumar & Johnson, 2021). Online students are also unique in that they are not spending most their time on a college campus, engaging in scholarly pursuits (Kumar & Johnson, 2021). They are less likely (or less available) to take advantage of graduate assistantships and research endeavors with faculty mentors. They may also be in different time zones and can have hectic work schedules; therefore, their availability to focus on academic

research is different than on-campus graduate students. This makes mentoring and establishing trust challenging, but not impossible.

For graduate students in an online environment—especially asynchronous environments—faculty may find it harder to develop a sense of belonging and relatedness for the students.

The online environment poses challenges for doctoral mentors because they seldom have a common research practice with their mentees, rarely or never meet their mentees in person ... and communicate through various technologies where the tone of voice or body language may be missing during communication. (Kumar & Johnson, 2021, p. 59).

Learner-centered online mentoring can help. “These remote learning environments have been identified as the third paradigm of education, which is characterized by interconnectedness with online media and multidirectional mentorship” (Goodrich, 2021, p. 256). Through this type of mentoring relationship, the mentor provides psychosocial and developmental support focused on the learners needs (Mullen, 2021). In this way, the mentoring relationship becomes less hierarchical and more collaborative and facilitative.

One strategy to assist mentors of online graduate students is for universities to provide professional development in online mentoring. Through professional development, faculty can be taught best practices such as sharing strategies that have helped them with their own research; encouraging students to use their own work experiences as possible research avenues; remaining flexible in communication practices and schedules; providing emotional support and cultural sensitivity to online students (Byrnes et al., 2019; Kumar & Johnson, 2021; Mullen, 2021; Pollard & Kumar, 2021; Sancyk et al., 2021). While online graduate students may not have the same opportunities to work directly with faculty mentors, they can still be mentored effectively and successfully throughout their academic journey.

Conclusions and Implications

In the knowledge economy, it is important for individuals to be able to think deeply and work independently. While effective mentorship can help shape a

graduate student and prepare them for success after graduate school, students also need to forge their own path. Their professional development depends on openness to change, feedback, action, and accountability. As graduate education is increasingly delivered online, it is important to explore a variety of options for enhanced mentoring, including opportunities for high-quality peer-to-peer mentoring. Graduate programs that hold exit interviews with their graduate students should consider asking about the mentoring experiences they had during the program, as well as the experiences they wish they had. The insights emerging from those interviews might guide future investments in graduate students as they navigate the challenges and opportunities with both the learning mode and the mentoring mode.

References

- Allen, S. (2020) What's the secret ingredient to great mentorship? *KelloggInsight*, 7 July. <https://insight.kellogg.northwestern.edu/article/great-mentorship-research>
- Bruell, A., & Ellis, L. (2023) Bosses say 'feedback' is too scary for some workers, so they use this word instead. *The Wall Street Journal*, 12 September. <https://www.wsj.com/lifestyle/careers/companies-worker-management-feedback-feedforward-hr-9758d6a7>
- Byrnes, D., Uribe-Florez, L.J., Trespalacios, J., & Chilson, J. (2019) Doctoral e-mentoring: current practices and effective strategies. *Online Learning Journal*, 23(1), 236–248. Available from: <https://doi.org/10.24059/olj.v23i1.1446>
- Coker, F.A. (2023) The seven top habits of appreciative advisers. *Journal of Appreciative Education*, 10, 33–36. <https://libjournal.uncg.edu/jae/article/view/2311>
- Dziczkowski, J. (2013) Mentoring and leadership development. *The Educational Forum*, 77(3), 351–360. Available from: <https://doi.org/10.1080/00131725.2013.792896>
- Ender, S.C., & Newton, F.B. (2000) *Students helping students: a guide for peer educators on college campuses*. Hokenen NJ: Jossey-Bass.
- Ford, A. (2018) 5 ways to get the most out of a mentor-protégé relationship. *KelloggInsight*, 1 August. <https://insight.kellogg.northwestern.edu/article/5-ways-to-get-the-most-out-of-a-mentor-protége-relationship>
- Golde, C.M. (2010) Student-advisor expectation scales. <https://vpge.stanford.edu/gateways/information-faculty-staff/directors>
- Goldsmith, M. (2008) *What got you here won't get you there: how successful people become even more successful*. London: Profile Books.

- Goodrich, A. (2021) Online peer mentoring and remote learning. *Music Education Research*, 23(2), 256–269. Available from: <https://doi.org/10.1080/14613808.2021.1898575>
- Grant, A. (2021) *Think again: the power of knowing what you don't know*. New York: Viking.
- Holley, K.A., & Caldwell, M.L. (2012) The challenges of designing and implementing a doctoral student mentoring program. *Innovative Higher Education*, 37(3), 243–253. Available from: <https://doi.org/10.1007/s10755-011-9203-y>
- Institute of Medicine, National Academy of Sciences, and National Academy of Engineering. (1997) *Adviser, teacher, role model, friend: on being a mentor to students in science and engineering*. Washington DC: The National Academies Press. Available from: <https://doi.org/10.17226/5789>
- Kaufman, E.K. (2021) *Unlocking the potential of mentor/mentee relationships*. Blacksburg VA: VTechWorks. <http://hdl.handle.net/10919/104681>
- Kaufman, E.K., & Stedman, N.L. (2022) Moving graduate and professional education forward to develop leaders equipped to effectively address wicked problems. *New Directions for Student Leadership*, 2022(176), 9–18. Available from: <https://doi.org/10.1002/yl.20526>
- Klinge, C.M. (2015) A conceptual framework for mentoring in a learning organization. *Adult Learning*, 26(4), 160–166. Available from: <https://doi.org/10.1177/1045159515594154>
- Kraft, M.A., Bolves, A.J., & Hurd, N.M. (2023) How informal mentoring by teachers, counselors, and coaches supports students' long-run academic success. *Economics of Education Review*, 95, 1–24. Available from: <https://doi.org/10.1016/j.econedurev.2023.102411>
- Kumar, S., & Johnson, M. (2021) Online mentoring of dissertations: the role of structure and support. *Studies in Higher Education*, 44(1), 59–71. Available from: <https://doi.org/10.1080/03075079.2017.1337736>
- Lorenzetti, D.L., Shipton, L., Nowell, L., Jacobsen, M., Lorenzetti, L., Clancy, T. et al. (2019) A systematic review of graduate student peer mentorship in academia. *Mentoring and Tutoring: Partnership in Learning*, 27(5), 549–576. Available from: <https://doi.org/10.1080/13611267.2019.1686694>
- Mullen, C.A. (2021) Online doctoral mentoring in a pandemic: help or hindrance to academic progress on dissertations? *International Journal of Mentoring and Coaching in Education*, 10(2), 139–157. Available from: <https://doi.org/10.1108/IJMCE-06-2020-0029>
- Nobles, M., & Fraizer, L. (2017) Assuming a leadership role: exploring situational leadership strategies for supporting and mentoring graduate student teaching assistants in anatomy and physiology. *HAPS Educator*, 21(3), 40–44. <https://eric.ed.gov/?id=EJ1227878>
- Ocobock, C., Niclou, A., Loewen, T., Arslanian, K., Gibson, R., & Vallengia, C. (2022) Demystifying mentorship: tips for successfully navigating the mentor–mentee journey. *American Journal of Human Biology*, 34, e23690. Available from: <https://doi.org/10.1002/ajhb.23690>
- Orsini, J., & Coers, N. (2022) Leaders and scholars: how faculty mentoring behavior influences the development of leadership self-efficacy. *Journal of Leadership Education*, 21(1), 114–134. Available from: <https://doi.org/10.12806/V21/I1/R8>
- Osman, S., Lane, J., & Goldsmith, M. (2023) *Becoming coachable: unleashing the power of executive coaching to transform your leadership and life*. New York: 100 Coaches Publishing.
- Pollard, R., & Kumar, S. (2021) Mentoring graduate students online: strategies and challenges. *The International Review of Research in Open and Distance Learning*, 22(2), 268–284. Available from: <https://doi.org/10.19173/irrodl.v22i2.5093>
- Ray, M.E., Coon, J.M., Al-Jumali, A.A., & Fullerton, M. (2019) Quantitative and qualitative factors associated with social isolation among graduate and professional health science students. *American Journal of Pharmaceutical Education*, 83(7), 1558–1569. Available from: <https://doi.org/10.5688/ajpe6983>
- Sanczyk, A., Merriweather, L.R., Howell, C.D., & Douglas, N.C. (2021) STEM doctoral mentoring: a call for a conscious, culturally responsive journey. *International Journal of Mentoring and Coaching in Education*, 10(3), 284–297. Available from: <https://doi.org/10.1108/IJMCE-07-2020-0034>
- Sinek, S. (2020) What I got wrong about mentorship [video]. YouTube. 2 December. <https://www.youtube.com/watch?v=TCiE1FDXdY>
- Tuma, T.T., Adams, J.D., Hultquist, B.C., & Dolan, E.L. (2021) The dark side of development: a systems characterization of the negative mentoring experiences of doctoral students. *CBE—Life Sciences Education*, 20(2), ar16. Available from: <https://doi.org/10.1187/cbe.20-10-0231>
- University of Florida, Graduate School. (2023) *Mentor training*. Office of Graduate Professional Development, Gainesville FL: University of Florida. <https://gradadvance.graduateschool.ufl.edu/programs/mentor-training/>
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